

# Colorado Department of Public Health and Environment

# **OPERATING PERMIT**

Trinidad Municipal Power Plant

First Issued: November 1, 1999

## AIR POLLUTION CONTROL DIVISION COLORADO OPERATING PERMIT

FACILITY NAME: Trinidad Municipal OPERATING PERMIT NUMBER

Power Plant

FACILITY ID: 0710005

RENEWED:

**EXPIRATION DATE:** 

November 1, 2005 November 1, 2010

MODIFICATIONS: See Appendix F of Permit

Issued in accordance with the provisions of Colorado Air Pollution Prevention and Control Act, 25-7-101 et

950PLA070

seq. and applicable rules and regulations.

ISSUED TO: PLANT SITE LOCATION:

Trinidad Municipal Power and Light 1925 East Main Street

P.O. Box 880 Trinidad, CO 81082 Trinidad, CO 81082 Las Animas County

INFORMATION RELIED UPON

Operating Permit Renewal Application Received: October 10, 2003

And Additional Information Received:

Nature of Business: Generation of Electricity

Primary SIC: 4911

RESPONSIBLE OFFICIAL FACILITY CONTACT PERSON

Name: James Soltis Name: David Brunelli

Title: Trinidad City Manager Title: Electric Superintendent

Phone: 719-846-9843 Phone: 719-846-9843 x20

SUBMITTAL DEADLINES

Semi-Annual Monitoring Period: January 1 – June 30, July 1 – December 31

Semi-Annual Monitoring Report: August 1, 2006 & February 1, 2007 and subsequent years

Annual Compliance Period: January 1 – December 31

Annual Compliance Certification: February 1, 2007 and subsequent years

Note that the Semi-Annual Monitoring Reports and Annual Compliance Certifications must be received

at the Division office by 5:00 p.m. on the due date. Postmarked dates will not be accepted for the

purposes of determining the timely receipt of those reports/certifications.

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## **SECTION I - General Activities and Summary**

#### 1. Permitted Activities

1.1 This facility generates electricity for transmission and/or distribution and is classified under the Standard Industrial Classification of 4911. The facility consists of two boiler/turbine units, two dual-fuel internal combustion engine/generator units, and three 1880 kW generators powered by diesel fired internal combustion engines. Historically the coal-fired boiler/turbine unit operated approximately 4500 hours per year and typically shut down in the summer months. The two dual fuel generators have operated primarily for emergency/standby purposes, typically less than 20 hours per year. The dual fuel generators have a name plate rating of 1875 kW, but are operated at 1700 kW because of their age.

The entire facility is currently operated as a standby/peaking plant consisting of one (1) coal-fired boiler/turbine unit, one (1) natural gas-fired boiler/turbine unit, two (2) dual fuel internal combustion engine/generator units, and three (3) 1880 kW diesel fuel internal combustion engine/generator units. Each boiler provides steam to its own 3750 kVA turbine/generator. The dual fuel engines use either diesel fuel alone or a combination of diesel fuel and natural gas.

The natural gas-fired boiler/turbine unit has been on "inactive" status for an extended period of time. With the addition of the three (3) diesel fired generator units, Trinidad has placed the coal-fired boiler/turbine unit in "inactive" status also. However, the utility retains the capability to operate whichever combination of units provides the optimum power production and maintains compliance with the conditions of this operating permit.

The facility is located at 1925 East Main in the city of Trinidad, Colorado. The area in which the plant operates is designated as attainment for all criteria pollutants.

The state of New Mexico is an affected state within 50 miles of the facility. There are no Federal Class I designated areas within 100 kilometers of the plant.

- 1.2 Until such time as this permit expires or is modified or revoked, the permittee is allowed to discharge air pollutants from this facility in accordance with the requirements, limitations, and conditions of this permit.
- 1.3 The Operating Permit incorporates the applicable requirements contained in the underlying construction permits, and does not affect those applicable requirements, except as modified during review of the application or as modified subsequent to permit issuance using the modification procedures found in Regulation No. 3, Part C. These Part C procedures meet all applicable substantive New Source Review requirements of Part B. Any revisions made using the provisions of Regulation No. 3, Part C shall become new applicable requirements for purposes of this Operating Permit and shall survive reissuance. This permit incorporates the applicable requirements (except as noted in Section II) from the following construction permits: 11LA387-1, 11LA387-2, 11LA387-3, and C-13,114

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- 1.4 All conditions in this permit are enforceable by US Environmental Protection Agency, Colorado Air Pollution Control Division (hereinafter Division) and its agents, and citizens unless otherwise specified. State-only enforceable conditions are: Permit Condition Number(s): Section II – Condition 1.8, Section IV - Conditions 14, 18 & 3.g (as noted).
- All information gathered pursuant to the requirements of this permit is subject to the 1.5 Recordkeeping and Reporting requirements listed under Condition 22 of the General Conditions in Section IV of this permit. Either electronic or hard copy records are acceptable.

#### 2. **Alternative Operating Scenarios**

- 2.1 The permittee shall be allowed to make the following changes to its method of operation without applying for a revision of this permit.
  - 2.1.1 No separate operating scenarios have been specified.

#### **3. Prevention of Significant Deterioration**

- 3.1 This facility is located in an area designated attainment for all pollutants. It is categorized as a major stationary source (Potential to Emit > 250 Tons/Year) for Sulfur Dioxide and Oxides of Nitrogen. Future modifications at this facility resulting in a significant net emissions increase (see Reg 3, Part D, Sections II.A.27 and 44) for any pollutant as listed in Regulation No. 3, Part D, Section II.A.44 or a modification which is major by itself may result in the application of the PSD review requirements.
- 3.2 There are no other Operating Permits associated with this facility for purposes of determining applicability of Prevention of Significant Deterioration regulations.

#### **Accidental Release Prevention Program (112(r))** 4.

4.1 Based upon the information provided by the applicant, this facility is not subject to the provisions of the Accidental Release Prevention Program (Section 112(r) of the Federal Clean Air Act).

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#### 5. **Compliance Assurance Monitoring (CAM)**

5.1 The following emission points at this facility use a control device to achieve compliance with an emission limitation or standard to which they are subject and have pre-control emissions that exceed or are equivalent to the major source threshold. They are therefore subject to the provisions of the CAM program as set forth in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV:

Combustion Engineers Type VU Coal-fired overfeed stoker/traveling grate boiler SN 15753

#### 6. **Summary of Emission Units**

6.1 The emissions units regulated by this permit are the following:

Emission Unit Number	AIRS Point Number	Facility Identifier	Description	Size	Pollution Control Device
B01	001	S001 Unit #1	Combustion Engineers Type VU Coal-fired overfeed stoker/traveling grate boiler SN 15753	68.6 MMBtu/Hr firing coal	Joy Manufacturing - Western Precipitation Division High Efficiency Centrifugal collector
B02	002	S002 Unit #2	Combustion Engineers Type VU Natural gas-fired boiler SN 15751	45 MMBtu/Hr firing natural gas	None
E03	003	S003 Unit #3	Enterprise IC Engine Model DGSR-38 SN 65025; Diesel or Diesel/Natural Gas Fired	2631 HP	None
E04	004	S004 Unit #4	Enterprise IC Engine Model DGSR-38 SN 65024; Diesel or Diesel/Natural Gas Fired	2631 HP	None
E05	008	S008 Unit #5	Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN-00-640	2610 HP	None
E06	009	S009 Unit #6	Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN-00-639	2610 HP	None
E07	010	S010 Unit #7	Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN-00-638	2610 HP	None
	005		Coal Handling and Storage Fugitive Emissions		Dust Control Plan
	006		Ash Storage Silo Vent		Fabric Filter
	007		Ash Silo Loadout Fugitive Emissions		Dust Control Plan

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## **SECTION II - Specific Permit Terms**

### 1. S001 - 68.6 MMBtu/Hr Coal Fired Boiler

NOTE: THIS BOILER IS ON INDEFINITE COLD STANDBY. THE FOLLOWING TERMS AND CONDITIONS FOR THIS BOILER SHALL BECOME APPLICABLE SIXTY (60) CALENDAR DAYS PRIOR TO COMMENCING OPERATION AND REMAIN IN EFFECT DURING OPERATION OF THE BOILER UNTIL RETURNED TO COLD STANDBY.

Parameter	Permit	Limit	ations	Compliance	Monitor	ring
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
$PM_{10}$	1.1			Per stack test results	Record keeping and calculation	Annually
$NO_X$				7.5 pound per ton		
СО				6.0 pound per ton		
PM	1.2	0.17 lb/MMBtu	36.2 tons/yr	Per stack test results	Record keeping and calculation	Monthly
$SO_2$		1.08 lb/MMBtu	245.1 tons/yr	Per stack test results		
Fuel Use	1.3		19,475 tons per year		Record keeping, vendor receipts and inventory	Monthly
Heat Content (BTU)	1.4				Fuel Sampling Plan	Per Division Approved
Ash Content						Coal Sampling Plan
Sulfur Content						1 1411
PM Monitoring	1.5				See Condit	ion 1.5
Opacity	1.6	Not to exceed 20% in Cond	except as provided ition 1.7		EPA Reference Method 9	Weekly & As Required
Opacity	1.7	exceed 30% for a aggregating more t	For certain operational activities, not to exceed 30% for a period or periods aggregating more than six (6) minutes in any consecutive sixty (60) minutes		EPA Reference Method 9	As Required
Lead	1.8		per standard cubic over a one-month riod	507 lb/10 <sup>12</sup> Btu	Modeling	See Condition 1.8
Compliance Test	1.9				EPA Reference Test, or other Division Approved Method	See Condition 1.9

Parameter			ations	Compliance	Monitoring	
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
Compliance Assurance Monitoring	1.10				See Cond	ition 1.10

1.1 Annual emissions of each pollutant shall be calculated using the emission factors listed in Summary Table 1 above and the annual fuel consumption in the equation below (Construction Permit C-13,114 as modified under the provisions of Section I, condition 1.3):

Tons/yr = Compliance Emission Factor (lbs/ton) x Annual Fuel Use (ton/yr)
2000 lbs/ton

1.2 Emissions shall not exceed the limitations stated in Summary Table 1 above (Construction Permit C-13,114 as modified under the provisions of Section I, condition 1.3). Except as provided for below, the emission factors listed above have been approved by the Division and shall be used to calculate emissions from this boiler, as follows:

Monthly emissions of each pollutant shall be calculated by the end of the subsequent month using the above emission factors and the monthly fuel consumption in the equation below:

 $Tons/month = \underline{Compliance\ Emission\ Factor\ (lbs/ton)\ x\ Monthly\ Fuel\ Use\ (ton/month)}}{2000\ lbs/ton}$ 

A twelve-month rolling total of emissions will be maintained to monitor compliance with the annual emission limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

If a reference method test is conducted under the provisions of Condition 1.9, and the results of the testing show emissions of any pollutant to be above the emission factor(s) listed above, the emission factor determined during that test (or any future such tests) and approved by the Division shall be used in the above equation starting with the month that the test was performed and for all subsequent calculations. In addition, the permittee shall re-calculate all twelve month rolling total, annual, or short-term emissions (whichever apply) using the emission rates determined by the tests since the last Division-approved EPA Reference Tests. In the absence of credible evidence to the contrary, the boiler will be considered to be out of compliance for any periods that the re-calculated emissions are greater than either of the emission limitations.

In addition, the permittee shall apply for a modification to this permit to reflect the higher emission factor within 30 days of Division approval of the new emission factor.

1.3 Fuel consumption shall not exceed the limitation shown in Summary Table 1 above (Construction Permit C-13,114 as modified under the provisions of Section I, condition 1.3). A twelve-month rolling total shall be maintained for demonstration of compliance with the annual

limitation. Each month a new twelve month total shall be calculated using the previous twelve months data.

- 1.3.1 The coal fired in the boiler shall be bituminous coal, sub-bituminous coal, or a blend thereof only. Coal shall be the only fuel used for the combustion heat needed for steam generation. Wood, mixed with other fuels, may be burned to heat the refractory and provide the combustion temperature needed to start the firing of coal.
- 1.4 The heat content, sulfur content, ash content, chloride content, and lead content of the coal shall be determined in accordance with the coal sampling plan of Condition 9 of this permit. The value(s) used for calculations shall be the most recent appropriate value from the coal sampling plan. The following values were used by the Division in evaluating compliance with the original permit application: Heat content = 10,500 BTU/lb, Sulfur Content = 0.5%, Ash Content = 8%. However, these are not limits.
- 1.5 Particulate Matter Emission Periodic Monitoring Requirements
  - 1.5.1 The performance of the multi-cyclone shall be monitored in accordance with the manufacturer's recommendations for best performance. The monitoring activities shall be logged, recording the date, the activity, identification of who performed the activity and any corrections, improvements or adjustments necessary. Documentation of the manufacturer's monitoring recommendations shall be maintained and made available to the Division upon request.
  - 1.5.2 Routine maintenance and operational procedures for the multi-cyclone shall be performed in accordance with manufacturer's recommendations and good engineering practices. The recommendations and procedures shall be documented in a written format. Any maintenance work performed on the multi-cyclone shall be documented. The manufacturer's recommendations, the permittee's operational procedures and the maintenance work records shall be maintained and made available to the Division for review upon request.
  - 1.5.3 The multi-cyclone shall be inspected for overall mechanical integrity within ninety (90) calendar days prior to taking the unit out of inactive status, and reinspected on an annual basis when the unit is in active status. The results of these inspections, as well as any repairs done as a result of these inspections, shall be documented and made available to the Division for review upon request.
  - 1.5.4 In the absence of evidence to the contrary, failure to perform the prescribed operation and maintenance procedures for the multi-cyclone shall be considered a failure to achieve the particulate removal efficiency necessary to demonstrate compliance with the particulate limit.
- 1.6 Except as provided in Condition 1.7 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. (Colorado Regulation No. 1, II.A.1).

One (1) Method 9 opacity observation shall be performed for each calendar week in which the boiler is in operation. In addition, a Method 9 observation shall be performed when non-routine visible emissions, or visible emissions that appear to be greater than 20% opacity under normal operating conditions, are detected to persist for longer than sixty (60) consecutive minutes.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

All Method 9 observations shall be performed by a certified observer. A clear, readable copy of the opacity observers certification shall be kept with the records of the Method 9 observations. The records and the copy of the certification shall be made available for Division review upon request.

- 1.7 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).
  - 1.7.1 A record shall be kept of the type, date and time of the commencement and completion of each and every condition subject to Regulation No. 1, Section II.A.4. The soot blowing is performed manually multiple times per day. A record shall be kept of the approximate clock times the soot blowing is to be performed. The records shall be made available for review upon request by the Division.

A Method 9 observation is required for any of these events lasting longer than thirty (30) continuous minutes. Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

All Method 9 observations shall be performed by a certified observer. A clear, readable copy of the opacity observers certification shall be kept with the records of the Method 9 observations. The records and the copy of the certification shall be made available for Division review upon request.

1.8 **State Only Requirement** – (Regulation No. 8, Part C, §I.B) Emissions of lead into the ambient air shall not result in an ambient lead concentration (expressed in terms of the element) in exceedence of 1.5 micrograms per standard cubic meter averaged over a one-month period. For the initial modeling, the monthly fuel consumption shall be equivalent to 31 days of operation at the design rate of the boiler for the coal being burned. The fuel consumption value shall be used with the AP-42 emission factor to estimate the lead emissions for the modeling. The results of

an analysis of the lead content of the coal currently being burned shall be included with the modeling report.

If the modeling analysis demonstrates the ambient air value is less than 25% of the emission limit, no additional modeling is required unless there is a change in the mine supplying the coal. If the source of the coal is changed, an analysis of the coal quality from the new source, an analysis of the coal from the existing source, and an estimate of the emission changes shall be submitted to the Division in a written report. The Division will review the analysis and make a determination of whether a new modeling of the lead emissions may be required.

If the modeling analysis demonstrates the ambient air values are in the range of values from 25% of the emission limit to the emission limit, the modeling shall be performed in even number years. This modeling shall be done using the normalized highest monthly fuel use and the related lead concentration.

If the modeling analysis demonstrates the ambient air standard is exceeded, the calendar year modeling shall be performed annually until three (3) consecutive calendar years demonstrate compliance. This modeling shall be done using the normalized highest monthly fuel use and the related lead concentration. The modeling schedule may then be changed to once each five (5) calendar years. A non-compliance demonstration at any time shall require the return to the annual modeling procedure. If the modeling demonstrates non-compliance, an investigation shall be conducted, the problem identified, the corrections made or required, and a written report completed and submitted to the Division within sixty (60) days of the non-compliance determination.

A change in the coal source may require modeling. A copy of the lead analysis for the new coal source and the projected highest monthly fuel use shall be submitted in writing to the Division within six (6) calendar months after starting to burn the coal from the new source. The Division will review the information and provide written notification of whether additional lead modeling is required. This paragraph applies to a change in the coal source only, not to a change in supplier.

The modeling protocol shall be submitted to the Division for written approval prior to performing the work. A written summary of two pages or less shall report the modeling results to the Division within 60 days of the end of the calendar year which is to be modeled. The first modeling shall be performed within thirty (30) calendar days following the first start-up of this source after the issuance of this operation permit.

1.9 Performance testing for particulate matter, and sulfur dioxide emissions along with pressure drop readings across the centrifugal collector (for CAM) shall be performed at whichever of the following scenarios occurs first after issuance of this permit: (1) the boiler is expected to be in service or is in service for longer than sixty (60) consecutive calendar days, OR (2) the boiler is in service for more than 1,440 hours in any twelve (12) consecutive calendar month period. The testing shall be performed again at the first occurrence of one of these two scenarios within eighteen (18) months of the expiration date of this permit. If the first test is not accomplished

within forty-two (42) calendar months after issuance of this permit because the unit remains inactive, only one (1) test is required upon the occurrence of one (1) of the two scenarios.

A stack testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to any performance of the test required under this condition. No stack test required herein shall be performed without prior written approval of the protocol by the Division. The Division reserves the right to witness the test. In order to facilitate the Division's ability to make plans to witness the test, notice of the date (s) for the stack test shall be submitted to the Division at least thirty (30) calendar days prior to the test. The Division may for good cause shown, waive this thirty (30) day notice requirement. In instances when a scheduling conflict is presented, the Division shall immediately contact the permittee in order to explore the possibility of making modifications to the stack test schedule. The required number of copies of the compliance test results shall be submitted to the Division within forty-five (45) calendar days of the completion of the test unless a longer period is approved by the Division.

- 1.10 The Compliance Assurance Monitoring (CAM) requirements in 40 CFR Part 64, as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV, apply to the coal fired boiler with respect to the PM limitation identified in Section II, Condition 1.2 as follows:
  - 1.10.1 The permittee shall follow the CAM Plan provided in Appendix I of this permit. Excursions, for purposes of reporting, are any time the opacity from the exhaust stack exceeds 20% (except as provided by Condition 1.7), or a pressure drop reading across the collector is less than the lowest pressure drop measured during the performance test, or more than one inch water column greater than the highest pressure drop measured during the performance test. Excursions shall be reported as required by Section IV, Conditions 21 and 22.d of this permit.
  - 1.10.2 Operation of Approved Monitoring
    - 1.10.2.1 At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment (40 CFR Part 64 § 64.7(b), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
    - 1.10.2.2 Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of these CAM requirements, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction

is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions (40 CFR Part 64 § 64.7(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

### 1.10.2.3 Response to excursions or exceedances

- a. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable (40 CFR Part 64 § 64.7(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process (40 CFR Part 64 § 64.7(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.2.4 After approval of the monitoring required under the CAM requirements, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the Division and, if necessary submit a proposed modification for this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters (40 CFR Part 64 § 64.7(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

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## 1.10.3 Quality Improvement Plan (QIP) Requirements

- 1.10.3.1 Based on the results of a determination made under the provisions of Condition 1.10.2.3.b, the Division may require the owner or operator to develop and implement a QIP (40 CFR Part 64 § 64.8(a), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.3.2 The owner or operator shall maintain a written QIP, if required, and have it available for inspection (40 CFR Part 64 § 64.8(b)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.3.3 The QIP initially shall include procedures for evaluating the control performance problems and, based on the results of the evaluation procedures, the owner or operator shall modify the plan to include procedures for conducting one or more of the following actions, as appropriate:
  - a. Improved preventative maintenance practices (40 CFR Part 64 § 64.8(b)(2)(i), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - b. Process operation changes (40 CFR Part 64 § 64.8(b)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - c. Appropriate improvements to control methods (40 CFR Part 64 § 64.8(b)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - d. Other steps appropriate to correct control performance (40 CFR Part 64 § 64.8(b)(2)(iv), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - e. More frequent or improved monitoring (only in conjunction with one or more steps under Conditions 1.10.3.3.a through d above) (40 CFR Part 64 § 64.8(b)(2)(v), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.3.4 If a QIP is required, the owner or operator shall develop and implement a QIP as expeditiously as practicable and shall notify the Division if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined (40 CFR Part 64 § 64.8(c), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.3.5 Following implementation of a QIP, upon any subsequent determination pursuant to Condition 1.10.2.3.b, the Division or the U.S. EPA may require that an owner or operator make reasonable changes to the QIP if the QIP is found to have:

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- a. Failed to address the cause of the control device performance problems (40 CFR Part 64 § 64.8(d)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); or
- b. Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions (40 CFR Part 64 § 64.8(d)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.3.6 Implementation of a QIP shall not excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act (40 CFR Part 64 § 64.8(e), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.4 Reporting and Recordkeeping Requirements
  - 1.10.4.1 <u>Reporting Requirements:</u> The reports required by Section IV, Condition 22.d, shall contain the information specified in Appendix B of the permit and the following information, as applicable:
    - a. Summary information on the number, duration and cause (including unknown cause, if applicable), for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable) ((40 CFR Part 64 § 64.9(a)(2)(ii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV); and
    - b. The owner or operator shall submit, if necessary, a description of the actions taken to implement a QIP during the reporting period as specified in Condition 1.10.3 of this permit. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring (40 CFR Part 64 § 64.9(a)(2)(iii), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
  - 1.10.4.2 <u>General Recordkeeping Requirements</u>: In addition to the recordkeeping requirements in Section IV, Condition 22.a through c:
    - a. The owner or operator shall maintain records of any written QIP required pursuant to Condition 1.10.3 and any activities undertaken to implement a QIP, and any supporting information required to be maintained under these CAM requirements (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions) (40 CFR Part 64 § 64.9(b)(1), as

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- adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- b. Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements (40 CFR Part 64 § 64.9(b)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).

#### 1.10.5 **Savings Provisions**

- 1.10.5.1 Nothing in these CAM requirements shall excuse the owner or operator of a source from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the federal clean air act. These CAM requirements shall not be used to justify the approval of monitoring less stringent than the monitoring which is required under separate legal authority and are not intended to establish minimum requirements for the purposes of determining the monitoring to be imposed under separate authority under the federal clean air act, including monitoring in permits issued pursuant to title I of the federal clean air act. The purpose of the CAM requirements is to require, as part of the issuance of this Title V operating permit, improved or new monitoring at those emissions units where monitoring requirements do not exist or are inadequate to meet the requirements of CAM (40 CFR Part 64 § 64.10(a)(1), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- Nothing in these CAM requirements shall restrict or abrogate the authority 1.10.5.2 of the U.S. EPA or the Division to impose additional or more stringent monitoring, recordkeeping, testing or reporting requirements on any owner or operator of a source under any provision of the federal clean air act, including but not limited to sections 114(a)(1) and 504(b), or state law, as applicable (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV).
- 1.10.5.3 Nothing in these CAM requirements shall restrict or abrogate the authority of the U.S. EPA or the Division to take any enforcement action under the federal clean air act for any violation of an applicable requirement or of any person to take action under section 304 of the federal clean air act (40 CFR Part 64 § 64.10(a)(2), as adopted by reference in Colorado Regulation No. 3, Part C, Section XIV)

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### 2. S002 – 45 MMBtu/hr Natural Gas Fired Boiler

NOTE: THIS BOILER IS ON INDEFINITE COLD STANDBY. THE FOLLOWING TERMS AND CONDITIONS FOR THIS BOILER SHALL BECOME APPLICABLE SIXTY (60) CALENDAR DAYS PRIOR TO COMMENCING OPERATION AND REMAIN IN EFFECT DURING OPERATION OF THE BOILER UNTIL RETURNED TO COLD STANDBY.

Parameter	Permit Condition	Limitations		Compliance Emission Factor	Monit	toring
	Number	Short Term	Long Term	1 detoi	Method	Interval
PM <sub>10</sub>	2.1			7.5 pound per MMscf	Recordkeeping	Annually
$SO_2$	2.1			0.6 pound per MMscf	and calculation	rimidumy
NO <sub>x</sub>				98 pound per MMscf		
VOC				5.4 pound per MMscf		
CO				82.4 pound per MMscf		
PM	2.2	0.19 pound p	oer MMBtu		Recordkeeping and calculation	Annually
Opacity	2.3	Not to exceed provided in Condi			Fuel restriction	Annually
Fuel Use	2.5				Recordkeeping	Annually

2.1 Annual emissions of each pollutant shall be calculated using the emission factors listed in Summary Table 2 above and the annual fuel consumption in the equation below:

Tons/yr = Compliance Emission Factor (lbs/MMscf) x Annual Fuel Use (MMscf/yr) 2000 lbs/ton

- 2.2 Particulate Matter in the flue gases shall not exceed 0.19 pounds per million BTU heat input (Regulation No. 1, Section III.A.1.b.).
- 2.3 Except as provided in Condition 2.4 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. (Colorado Regulation No. 1, II.A.1). In the absence of evidence to the contrary, compliance with the opacity limit shall be presumed whenever natural gas is used as the fuel.
- 2.4 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

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2.5 Actual fuel consumption shall be recorded annually. The terms and conditions of this permit are based on the boiler being fueled with natural gas only. The use of any other fuel may require the permit to be re-opened prior to use of the other fuel.

#### 3. S003 & S004 – Two Enterprise dual fuel Engines, 2631 HP

Limits are for each engine

Parameter	Permit	Limita	tions	Compliance Emission		Monit	oring
	Condition	Short Term	Long Term	Fa	ctor	Method	Interval
	Number			Diesel	Natural Gas		
				Lb/Mgal	Lb/MMscf		
PM	3.1			33.5	10	Record keeping and calculation	Annually
PM <sub>10</sub>				32	10		
$SO_2$				31.2	0.6		
$NO_X$				469	3400		
VOC				32.1	82.9		
СО				102	430		
Fuel Use	3.2					Record keeping	Annually
Opacity	3.3	Not to exceed 2 provided in Co				EPA Reference Method 9	Annually & As Required

- 3.1 Annual emissions of each pollutant shall be calculated using the emission factors listed in Summary Table 3 above and the annual fuel consumption. (Note: Mgal = 1000 gallons).
- 3.2 Actual diesel fuel and natural gas consumption shall be recorded annually. The terms and conditions of this permit are based on the engines being fueled with No. 2 distillate fuel oil alone or No. 2 distillate fuel oil and natural gas. The use of any other fuel may require the permit to be re-opened prior to use of the other fuel. No. 2 distillate oil is ASTM Grade 2 distillate oil as defined by ASTM D975-98 or subsequent applicable revision.
- 3.3 Except as provided in Condition 3.4 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. (Colorado Regulation No. 1, II.A.1).
  - A Method 9 opacity observation shall be performed on each engine at least once per calendar year of operation when the engine is operating under load during conditions suitable for properly performing a valid Method 9 observation. An observation shall be conducted both while the engine is fueled with diesel fuel only, and while fueled with a diesel/natural gas mix. If an engine has not been operated under load or if a valid Method 9 observation could not be performed when the engine did operate

while burning diesel fuel only, or a diesel fuel/natural gas mix, during the calendar year the permittee is not required to operate the engine on that fuel for the sole purpose of obtaining an annual opacity observation. In addition, a Method 9 observation shall be performed when non-routine visible emissions, or visible emissions that appear to be greater than 20% opacity under normal operating conditions, are detected to persist for longer than sixty (60) consecutive minutes.

If any of the Method 9 opacity observations exceed the applicable standard, additional observations must be performed. Consecutive observations shall be performed until two (2) consecutive observations are in compliance with the standard. The first additional observation, and each successive observation shall be performed no later than sixty (60) minutes after the completion of the previous observation.

All Method 9 observations shall be performed by a certified observer. A clear, readable copy of the opacity observers certification shall be kept with the records of the Method 9 observations. The records and the copy of the certification shall be made available for Division review upon request.

- 3.4 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).
  - A record shall be kept of the type, date and time of the commencement and completion of each and every condition subject to Regulation No. 1, Section II.A.4 that results in an opacity exceedance. The records shall be made available for review upon request by the Division. A Method 9 observation shall be performed any time an engine start-up requires longer than ten consecutive minutes.

If any of the Method 9 opacity observations exceed the applicable standard, additional observations must be performed. Consecutive observations shall be performed until two (2) consecutive observations are in compliance with the standard. The first additional observation, and each successive observation shall be performed no later than sixty (60) minutes after the completion of the previous observation.

All Method 9 observations shall be performed by a certified observer. A clear, readable copy of the opacity observers certification shall be kept with the records of the Method 9 observations. The records and the copy of the certification shall be made available for Division review upon request.

### 4. S008, S009 & S010 – Three Caterpillar diesel fueled engines, 2610 HP

Limits are the total for all three engines as one group

Parameter	Permit	Lim	nitations	Compliance	Monitor	ring
	Condition Number	Short Term	Long Term	Emission Factor	Method	Interval
$NO_X$	4.1		38.5 ton per year	497 pound per Mgallons	Record keeping and calculation	Monthly
СО			10.2 ton per year	132 pound per Mgallons		
PM	4.2			4.8 pound per Mgallons	Record keeping and calculation	Annually
$PM_{10}$				4.8 pound per Mgallons		
$SO_2$				7.0 pound per Mgallons		
VOC				9.3 pound per Mgallons		
Fuel Use	4.3		155,000 gallons per year		Record keeping and calculation	Monthly
Opacity	4.4	Not to exceed provided in Cor	d 20% except as addition 4.5		EPA Reference Method 9	Annually & As Required
Portable Monitoring	4.6				Flue Gas Analyzer	Annually
Hours of Operation	4.7				Record keeping	Monthly
SO <sub>2</sub> - Applies to Each Unit	4.8	0.8 lb	s/mmBtu		Fuel Restriction	Whenever Diesel Fuel is Used as Fuel
Acid Rain New Unit Exemption	4.9				See Condition 4.9	

4.1 Except as provided below, the emission factors listed in Summary Table 4 above have been approved by the Division and shall be used to calculate emissions from these engines as follows (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Section I.A.7 and Part C, Section III.B.7, based on maximum production rate identified in an APEN filed by the source dated 09/03/1998):

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Monthly emissions for  $NO_x$  and CO shall be calculated by the end of the subsequent month using the above emission factors and the monthly fuel consumption in the equation below:

ton/month = Compliance Emission Factor (lbs/Mgal) x fuel use (Mgal/mo)
2000 lb/ton

note: Mgal = 1000 gallons

Monthly emissions from each engine shall be summed together and a twelve month rolling total of emissions will be maintained to monitor compliance with the annual emission limitation. Each month, a new twelve month total shall be calculated using the previous twelve months' data.

If a reference method test is conducted under the provisions of condition 4.6, and the results of the testing show that either the  $NO_X$  or CO emission factors are greater than the emission factors listed above, the permittee shall apply for a modification to this permit to reflect, at a minimum, the higher emission rates/factors within 60 days of the completion of the reference method test.

- 4.2 Annual emissions of each pollutant listed in Summary Table 4 above shall be calculated using the above emission factors and the annual fuel consumption (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Section I.A.7 and Part C, Section III.B.7, based on maximum production rate identified in an APEN filed by the source dated 09/03/1998).
- 4.3 Fuel Consumption for the engines shall not exceed the limitation shown in Summary Table 4 above (as provided for under the provisions of Section I, Condition 1.3 and Colorado Regulation No. 3, Part C, Section I.A.7 and Part C, Section III.B.7, based on maximum production rate identified in an APEN filed by the source dated 09/03/1998). Within the first seven days of every month, the fuel meter shall be read and recorded. A twelve-month rolling total shall be maintained for demonstration of compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.

The terms and conditions of this permit are based on the engines being fueled with No. 2 distillate fuel oil. The use of any other fuel may require the permit to be re-opened prior to use of the other fuel. No. 2 distillate oil is ASTM Grade 2 distillate oil as defined by ASTM D975-98 or subsequent applicable revision.

- 4.4 Except as provided in Condition 4.5 below, no owner or operator of a source shall allow or cause the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. (Colorado Regulation No. 1, II.A.1).
  - 4.4.1 A Method 9 opacity observation shall be performed on each engine at least once per calendar year of operation during conditions suitable for properly performing a valid Method 9 observation. If an engine has not been operated under load during the calendar year, or if a valid Method 9 observation could not be performed when the engine did operate, the permittee is not required to operate the engine for the sole

purpose of obtaining an annual opacity observation. In addition, a Method 9 observation shall be performed when non-routine visible emissions, or visible emissions that appear to be greater than 20% opacity under normal operating conditions, are detected to persist for longer than sixty (60) consecutive minutes.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

All Method 9 observations shall be performed by a certified observer. A clear, readable copy of the opacity observers certification shall be kept with the records of the Method 9 observations. The records and the copy of the certification shall be made available for Division review upon request.

- 4.5 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).
  - 4.5.1 A record shall be kept of the type, date and time of the commencement and completion of each and every condition subject to Regulation No. 1, Section II.A.4 that results in an opacity exceedance. The records shall be made available for review upon request by the Division. A Method 9 observation shall be performed any time an engine start-up requires longer than ten consecutive minutes.

Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.

All Method 9 observations shall be performed by a certified observer. A clear, readable copy of the opacity observers certification shall be kept with the records of the Method 9 observations. The records and the copy of the certification shall be made available for Division review upon request.

4.6 Portable Monitoring (9/13/2005 modified version): Emission measurements of nitrogen oxides (NO<sub>X</sub>) and carbon monoxide (CO) shall be conducted annually using a portable flue gas analyzer. More frequent portable monitoring may be conducted at the sole discretion of the source; however, at least four calendar months shall separate subsequent Division-required annual tests. Note that if the engine is operated for less than 100 hrs in any annual period, then the portable monitoring requirements do not apply.

A portable monitor testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to the Division-required initial test. The protocol shall include examples of all calculations to be used to determine the emission factors. Written approval of the protocol must be received prior to any testing. Prior Division-approved protocols for either the facility or the owner/operator may be used for subsequent tests without additional Division review or approval. For the initial test, calibration of the analyzer shall be conducted according to manufacturer's instructions.

Results of the portable flue gas analyzer tests shall be used to monitor the compliance status of this unit. For comparison with the Compliance Emission Factors, the results of the tests shall be converted to a lb/Mgal basis.

If the portable flue gas analyzer results indicate compliance with both the  $NO_X$  and CO Compliance Emission Factors and all calculations of the rolling twelve (12) month totals for fuel use are at or below the allowable fuel use limit, in the absence of credible evidence to the contrary, the source may certify that the engine is in compliance with both the  $NO_X$  and CO annual emission limitations for the relevant time period.

An exceedance of either the  $NO_X$  or CO Compliance Emission Factors during the initial portable flue gas analyzer test shall require a subsequent portable analyzer test within 14 operating days of the initial test. Calibration gases shall be used to calibrate the portable analyzer for all tests conducted subsequent to the initial test. Note that if the unit is operated for any period of time during a day, then that day counts as an operating day.

If the subsequent portable flue gas analyzer results fail to verify that both the  $NO_X$  and CO emission factors are less than or equal to the Compliance Emission Factors, the source will notify the Division in writing within 10 calendar days of the end of the 14 day period. Results of all such testing and the associated calculations shall be submitted to the Division with the notification. The source will be required to conduct EPA Reference Test Methods (identified as Reference Method 7E and Reference Method 10 (40C.F.R. Part 60 Appendix A)) or other test methods or procedures acceptable to the Division within 60 calendar days of the end of the 14 day period allowed for the portable flue gas analyzer testing. A compliance testing protocol shall be submitted for Division approval at least thirty (30) calendar days prior to the test. The protocol shall include examples of all calculations to be used to determine the emission factors. Written approval of the protocol must be received prior to any testing. The Division shall be notified at least 30 calendar days prior to the EPA Reference Test date, so that it may choose whether to observe the testing. Results of all Reference Tests and the associated calculations required below shall be submitted to the Division within 30 calendar days of the test. Note that any of the above timelines may be revised upon Division approval.

For comparison with the Compliance Emission Factors, the emission factors determined by the EPA Reference Test and approved by the Division shall be converted to the same units as the Compliance Emission Factors.

If the EPA Reference Test results indicate compliance with both the  $NO_X$  and CO Compliance Emission Factors and all calculations of the rolling twelve (12) month totals for fuel use are at or below the allowable fuel use limit, in the absence of credible evidence to the contrary, the source may certify that the engine is in compliance with both the  $NO_X$  and CO annual emission limitations for the relevant time period.

If the EPA Reference Test shows that either the  $NO_X$  or CO emission factors are greater than the ones set forth in the permit, the permittee shall apply for a modification to this permit to reflect, at a minimum, the higher Compliance Emission Factor(s) within 60 days of the completion of the reference method test.

Results of all tests conducted shall be kept on site and made available to the Division upon request.

- 4.7 Hours of operation for each engine shall be monitored and recorded monthly. Monthly hours of operation for each engine shall be summed and used in a running total for each annual compliance period. The total hours of operation for each engine shall be used to monitor compliance with the annual limits as specified in Condition 4.6, if applicable.
- 4.8 Sulfur Dioxide (SO<sub>2</sub>) emissions **from each engine** shall not exceed 0.8 lbs/mmBtu (Colorado Regulation No. 1, Section VI.B.4.b.(i)). In the absence of credible evidence to the contrary, compliance with the sulfur dioxide limitation is presumed whenever diesel fuel is used as fuel in the engines.
- 4.9 The engines at this facility qualify for **new unit exemptions** under the Acid Rain Program pursuant to 40 CFR Part 72 § 72.7 as follows:
  - 4.9.1 This new unit exemption applies to any new utility unit that has not previously lost an exemption under the provisions of Condition 4.9.4.4 and that, in each year starting with the first year for which the unit is to be exempt under this Condition (40 CFR Part 72 § 72.7(a), as adopted by reference in Colorado Regulation No. 18):
    - 4.9.1.1 Serves during the entire year (except for any period before the unit commenced commercial operation) one or more generators with total name-plate capacity of 25MWe or less;
    - 4.9.1.2 Burns fuel that does not include any coal or coal-derived fuel (except coal-derived gaseous fuel with a total sulfur content no greater than natural gas); and
    - 4.9.1.3 Burns gaseous fuel with an annual average sulfur content of 0.05 percent or less by weight (as determined under Condition 4.9.3), and non-gaseous fuel with an annual average sulfur content of 0.05 percent or less by weight (as determined under Condition 4.9.3).
  - 4.9.2 Any new utility that meets the requirements of Condition 4.9.1 and that is not allocated any allowances under Subpart B of 40 CFR Part 73 shall be exempt from

the Acid Rain Program except for the provisions of 40 CFR Part 72 §§ 72.2 through 72.6 and 72.10 through 72.13 (40 CFR Part 72 § 72.7(b)(1), as adopted by reference in Colorado Regulation No. 18).

4.9.3 Compliance with the requirement that fuel burned during the year have an annual average sulfur content of 0.05 percent by weight or less shall be determined using a method of determining sulfur content that provides information with reasonable precision, reliability, accessibility, and timeliness (40 CFR Part 72 § 72.7(d), as adopted by reference in Colorado Regulation No. 18).

For nongaseous fuel burned during the year, the requirement is met if the annual average sulfur content is equal to or less than 0.05 percent by weight. The annual average sulfur content, as a percentage by weight, shall be calculated using the equation below. In lieu of the factor, volume times density  $(V_n d_n)$ , in the equation, the factor, mass  $(M_n)$ may be used, where  $M_n$  is: mass of the nongaseous fuel in a delivery during the year to the unit of which the nth sample is taken, in lb; or, for fuel delivered during the year to the unit continuously by pipeline, mass of the nongaseous fuel delivered starting from when the nth sample of such fuel is taken until the next sample of such fuel is taken, in lb.

$$\%S_{annual} = \underbrace{\sum\%S_{\underline{n}}V_{\underline{n}}\underline{d}_{\underline{n}}}_{\sum V_{n}}\underline{d}_{\underline{n}}$$

Where:

 $%S_{annual} = annual average sulfur content of the fuel burned during the year by the unit, as a percentage by weight;$ 

 $%S_n =$  sulfur content of the nth sample of the fuel delivered during the year to the unit, as a percentage by weight;

 $V_n$  = volume of the fuel in a delivery during the year to the unit of which the nth sample is taken, in standard cubic feet; or, for fuel delivered during the year to the unit continuously by pipeline, volume of the fuel delivered starting from when the nth sample of such fuel is taken until the next sample of such fuel is taken, in standard cubic feet;

 $d_n$  = density of the nth sample of the fuel delivered during the year to the unit, in lb per standard cubic foot; and

n = each sample taken of the fuel delivered during the year to the unit, taken at least once for each delivery; or, for fuel that is delivered during the year to the unit continuously by pipeline, at least once each quarter during which the fuel is delivered.

#### **4.9.4** Special Provisions for New Unit Exemptions

- 4.9.4.1 The owners or operators of a unit exempt under the provisions of Condition 4.9 shall (40 CFR Part 72 § 72.7(f)(1), as adopted by reference in Colorado Regulation No. 18):
  - a. Comply with the requirements of Condition 4.9.1 for all periods for which the unit is exempt under this section; and
  - b. Comply with the requirements of the Acid Rain Program concerning all periods for which the exemption is not in effect, even if such

requirements arise, or must be complied with, after the exemption takes effect.

- 4.9.4.2 For any period for which a unit is exempt under Condition 4.9, the unit is not an affected unit under the Acid Rain Program and 40 CFR Parts 70 and 71 and is not eligible to be an opt-in source under 40 CFR Part 74. As an unaffected unit, the unit shall continue to be subject to any other applicable requirements under 40 CFR Parts 70 and 71 (40 CFR Part 72 § 72.7(f)(2), as adopted by reference in Colorado Regulation No. 18).
- 4.9.4.3 For a period of 5 years from the date the records are created, the owners and operators of a unit exempt under this section shall retain at the source that includes the unit records demonstrating that the requirements of Condition 4.9.1 are met. The 5-year period for keeping records may be extended for cause, at any time prior to the end of the period, in writing by the Administrator or the permitting authority

Such records shall include, for each delivery of fuel to the unit or for fuel delivered to the unit continuously by pipeline, the type of fuel, the sulfur content, and the sulfur content of each sample taken.

The owners and operators bear the burden of proof that the requirements of Condition 4.9.1 are met (40 CFR Part 72 § 72.7(f)(3), as adopted by reference in Colorado Regulation No. 18).

- 4.9.4.4 **Loss of Exemption.** On the earliest of the following dates, a unit exempt under 40 CFR Part 72 §§ 72.7 (b), (c), or (e) shall lose its exemption and become an affected unit under the Acid Rain Program and 40 CFR Parts 70 and 71 of this:
  - a. The date on which the unit first serves one or more generators with total nameplate capacity in excess of 25 MWe;
  - b. The date on which the unit burns any coal or coal-derived fuel except for coal-derived gaseous fuel with a total sulfur content no greater than natural gas; or
  - c. January 1 of the year following the year in which the annual average sulfur content for gaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR Part 72 § 72.7(d)) or for nongaseous fuel burned at the unit exceeds 0.05 percent by weight (as determined under 40 CFR Part 72 § 72.7(d)).

Notwithstanding 40 CFR Part 72 §§ 72.30(b) and (c), the designated representative for a unit that loses its exemption under this section shall submit a complete Acid Rain permit application on the later of January 1, 1998 or 60 days after the first date on which the unit is no longer exempt.

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For the purpose of applying monitoring requirements under 40 CFR Part 75, a unit that loses its exemption under Condition 4.9 shall be treated as a new unit that commenced commercial operation on the first date on which the unit is no longer exempt (40 CFR Part 72 § 72.7(f)(4), as adopted by reference in Colorado Regulation No. 18).

#### 5. Coal Handling

NOTE: THE COAL-FIRED BOILER IS ON INDEFINITE COLD STANDBY. THE FOLLOWING TERMS AND CONDITIONS SHALL BECOME APPLICABLE SIXTY (60) CALENDAR DAYS PRIOR TO COMMENCING OPERATION AND REMAIN IN EFFECT DURING OPERATION OF THE BOILER UNTIL RETURNED TO COLD STANDBY.

Parameter	Permit Condition	Limitations		Compliance Emission Factor	Monit	oring
	Number	Short Term	Long Term	Emilipron 1 wever	Method	Interval
Coal Throughput	5.1		29,800 tons per year		Record keeping and calculation	Monthly
Fugitive Particulate Emissions	5.2 5.3			0.5 pound per ton	Visual Observation Method 9	Once per week when coal is stock-piled As required

- 5.1 Coal throughput shall not exceed the limitation shown in Summary Table 5 above (Construction Permit 11LA387-1 as modified under the provisions of Section I, condition 1.3). A twelve-month rolling total shall be maintained for demonstration of compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 5.2 Coal truck loads shall be covered to minimize fugitive particulate matter emissions (Construction Permit 11LA387-1 as modified under the provisions of Section I, condition 1.3).
- 5.3 A weekly check of the storage piles shall be conducted to determine if visible emissions exist. Records of the observations shall be maintained and made available for Division review upon request. The 20% opacity, no off-property transport, and nuisance emission limitation are guidelines and not enforceable standards and no person shall be cited for violation thereof pursuant to C.R.S. 1973, 25-7-115 as amended.
  - 5.3.1 20% Opacity When visible emissions from the storage piles persist for longer than thirty (30) continuous minutes, a Method 9 opacity observation shall be made by a person certified as a Method 9 observer to determine if the emissions are in excess of 20% opacity and if conditions are suitable for performing a valid Method 9 observation. Copies of all Method 9 observations and the reader certification shall be kept on file and made available to the Division for review upon request. If the 20% opacity is exceeded, the cause shall be determined and corrective actions taken. A record of the Method 9 readings, existing conditions, and the action taken shall be maintained and made available for Division review upon request.
  - 5.3.2 Off-Property Transport and Nuisance Provision When visible emissions from the storage piles persist for longer than thirty (30) continuous minutes, an inspection shall

be made to determine if the visible emissions are being transported off the property on which the source is located. If there is off-property transport of the visible emissions, the cause shall be determined and corrective actions taken. A record of the existing condition and the action taken shall be maintained and made available to the Division for review upon request.

As used herein, "nuisance" shall mean the emission of fugitive particulates which constitutes a private or public nuisance as defined in common law, the essence of which is that such emissions are unreasonable interfering with another person's use and enjoyment of his property. Such interference must be "substantial" in its nature as measured by a standard that it would be of definite offensiveness, inconvenience, or annoyance to a normal person in the community.

#### 6. Ash Silo Vent

NOTE: THE COAL-FIRED BOILER IS ON INDEFINITE COLD STANDBY. THE FOLLOWING TERMS AND CONDITIONS SHALL BECOME APPLICABLE SIXTY (60) CALENDAR DAYS PRIOR TO COMMENCING OPERATION AND REMAIN IN EFFECT DURING OPERATION OF THE BOILER UNTIL RETURNED TO COLD STANDBY.

Parameter	Permit Condition	Limitations		Compliance Emission Factor		Mo	onitoring			
	Number	Short Term	Lo	ng Ter	m				Method	Interval
PM	6.1		0.01 year	ton	per	0.006 ton	pound	per	Record keeping and calculation	
Ash Handling	6.2		3,631 year	tons	per				Record keeping and calculation	
Collection System	6.3	99.7% Control	Efficier	ncy					See Condition	5.3
Opacity	6.4	Not to ea	xceed 2	0%					Visual Observation	Once per week when coal- fired boiler is operating
									Method 9	As required

- PM emissions shall not exceed the limitation shown in Summary Table 6 above (Construction Permit 11LA387-2 as modified under the provisions of Section I, condition 1.3). A twelve-month rolling total shall be maintained for demonstration of compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
- Ash handling shall not exceed the limitation shown in Summary Table 6 above (Construction Permit 11LA387-2 as modified under the provisions of Section I, condition 1.3). A twelve-month rolling total shall be maintained for demonstration of compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
  - 6.2.1 The total quantity of ash delivered to the silo shall be calculated from the coal consumption and the coal ash content.
- 6.3 The manufacturer's instructions and operating and maintenance procedures as well as good engineering practices shall be followed to ensure the Nuveyor dust collection system achieves a control efficiency of 99.7% on a continuous basis (Construction Permit 11LA387-2 as modified under the provisions of Section I, condition 1.3). Operating and maintenance procedures shall be documented and submitted to the Division for review and approval within six (6) calendar months following the first start-up after the issuance of this operating permit.

- Except as provided in Condition 6.5 below, no owner or operator of a source shall allow or cause 6.4 the emission into the atmosphere of any air pollutant which is in excess of 20% opacity. (Colorado Regulation No. 1, II.A.1).
  - 6.4.1 At least once each week when the coal-fired boiler is operating, an inspection shall be made for visible emissions other than steam from the bag filter. When visible emissions persist for longer than thirty (30) continuous minutes and if conditions are suitable for performing a valid Method 9 observation, a Method 9 opacity observation shall be made by a person certified as a Method 9 observer to determine if the emissions are in excess of 20% opacity. Copies of all Method 9 observations and the reader certification shall be kept on file and made available to the Division for review If the 20% opacity is exceeded, the cause shall be determined and corrective actions taken. A record of the Method 9 readings, existing conditions, and the action taken shall be maintained and made available for Division review upon request.
  - 6.4.2 Subject to the provisions of C.R.S. 25-7-123.1 and in the absence of credible evidence to the contrary, exceedance of the limit shall be considered to exist from the time a Method 9 reading is taken that shows an exceedance of the opacity limit until a Method 9 reading is taken that shows the opacity is less than the opacity limit.
- 6.5 No owner or operator of a source shall allow or cause to be emitted into the atmosphere any air pollutant resulting from the building of a new fire, cleaning of fire boxes, soot blowing, start-up, any process modification, or adjustment or occasional cleaning of control equipment, which is in excess of 30% opacity for a period or periods aggregating more than six (6) minutes in any sixty (60) consecutive minutes (Colorado Regulation No. 1, Section II.A.4).

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#### 7. Ash Silo Loadout

NOTE: THE COAL-FIRED BOILER IS ON INDEFINITE COLD STANDBY. THE FOLLOWING TERMS AND CONDITIONS SHALL BECOME APPLICABLE SIXTY (60) CALENDAR DAYS PRIOR TO COMMENCING OPERATION AND REMAIN IN EFFECT DURING OPERATION OF THE BOILER UNTIL RETURNED TO COLD STANDBY.

Parameter	Permit Condition	Limitations		Compliance Emission Factor	Monitoring	
	Number	Short Term	Long Term		Method	Interval
PM	7.1		0.73 ton per year	0.402 pound per ton	Record keeping and calculation	Monthly
Ash Production	7.2		3,631 tons per year		Record keeping and calculation	Monthly
Particulate Emissions Control Plan	7.3				See Condition 7.3	
Opacity	7.4				Visual Observation	Once per week when coal- fired boiler is operating
					Method 9	As required

- 7.1 PM emissions shall not exceed the limitation shown in Summary Table 7 above (Construction Permit 11LA387-3 as modified under the provisions of Section I, condition 1.3). A twelve-month rolling total shall be maintained for demonstration of compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data.
- 7.2 Ash production shall not exceed the limitation shown in Summary Table 7 above (Construction Permit 11LA387-3 as modified under the provisions of Section I, condition 1.3). A twelve-month rolling total shall be maintained for demonstration of compliance with the annual limitations. Each month a new twelve month total shall be calculated using the previous twelve months data
  - 7.2.1 The total quantity of ash unloaded shall be calculated from the coal consumption and the coal ash content.
- 7.3 The source shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions (Colorado Regulation No. 1, Section II.D.1.a). The following particulate emissions control measures shall be used for enforcement purposes on the particulate emission producing sources, as required by Colorado Regulation No. 1 (Construction Permit 11LA387-3 as modified under the provisions of Section I, condition 1.3):
  - 7.3.1 Ash truck loads shall be fully covered to prevent spillage en route and minimize fugitive particulate emissions.

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- 7.3.2 While being loaded into trucks, ash shall be continuously mixed with a sufficient amount of water to control fugitive particulate emissions.
- 7.3.3 The "Dustless" rotary ash unloader shall be maintained properly in accordance with manufacturer's instructions to achieve control efficiency of at least 80% on a continuous basis
  - 7.3.3.1 Manufacturer's instructions and operating and maintenance procedures as well as good engineering practices shall be followed to ensure the control efficiency of the system is maintained.
  - 7.3.3.2 Operating and maintenance procedures shall be developed and submitted to the Division within six (6) months following the first start-up after the issuance of this permit. The procedures must be reviewed and approved by the Division.
- 7.4 A weekly check of the silo unloading area shall be conducted to determine if visible emissions exist. Records of the observations shall be maintained and made available for Division review upon request. The 20% opacity, no off-property transport, and nuisance emission limitation are guidelines and not enforceable standards and no person shall be cited for violation thereof pursuant to C.R.S. 1973, 25-7-115 as amended.
  - 7.4.1 20% Opacity When visible emissions from the silo unloading area persist for longer than thirty (30) continuous minutes and if conditions are suitable for performing a valid Method 9 observation, a Method 9 opacity observation shall be made by a person certified as a Method 9 observer to determine if the emissions are in excess of 20% opacity. Copies of all Method 9 observations and the reader certification shall be kept on file and made available to the Division for review upon request. If the 20% opacity is exceeded, the cause shall be determined and corrective actions taken. A record of the Method 9 readings, existing conditions, and the action taken shall be maintained and made available for Division review upon request.
  - 7.4.2 Off-Property Transport and Nuisance Provision When visible emissions from the silo unloading area persist for longer than thirty (30) continuous minutes, an inspection shall be made to determine if the visible emissions are being transported off the property on which the source is located. If there is off-property transport of the visible emissions, the cause shall be determined and corrective actions taken. A record of the existing condition and the action taken shall be maintained and made available to the Division for review upon request.
  - As used herein, "nuisance" shall mean the emission of fugitive particulates which constitutes a private or public nuisance as defined in common law, the essence of which is that such emissions are unreasonably interfering with another person's use and enjoyment of his property. Such interference must be "substantial" in its nature as measured by a standard that it would be of definite offensiveness, inconvenience, or annoyance to a normal person in the community.

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#### 8. **Substitution for Manufacturer's Recommendations**

8.1 Some of the terms and conditions of this permit require operation of a source in accordance with the manufacturer's recommendations. In the event the manufacturer's recommendations are no longer available, the permittee shall develop a written document to identify the operations and procedures to be followed to ensure the source and the air pollution control equipment is maintained and operated to properly control emissions.

#### 9. **Coal Consumption and Sampling Plans**

- 9.1 Coal Sampling Plan - Coal shall be sampled and tested to determine the heat content and the percent lead, chloride, sulfur and ash by weight in accordance with a written plan approved by the Division. The plan shall include the features identified in Appendix G as a minimum. Vendor receipts or invoices may be used to provide the values. The vendor shall provide a written and signed statement certifying that the coal sampling and analysis has been performed in accordance with the procedures identified in the approved plan and specifically identify the analysis procedures used.
- 9.2 Coal Consumption - A method is needed to monitor the amount of coal combusted in the coal-The coal consumption measurement plan shall include features similar to those fired boiler. identified in Appendix H as a minimum.
- 9.3 The coal sampling plan and the coal consumption plan shall be documented and submitted to the Division for review at least sixty (60) days before the source is removed from inactive status and commences operation. These plans shall be implemented upon commencing operation.

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## **SECTION III - Permit Shield**

Regulation No. 3, 5 CCR 1001-5, Part C, §§ I.A.4, V.D. & XIII.B; § 25-7-114.4(3)(a), C.R.S.

## 1. Specific Non-Applicable Requirements

Based on the information available to the Division and supplied by the applicant, the following parameters and requirements have been specifically identified as non-applicable to the facility to which this permit has been issued. This shield does not protect the source from any violations that occurred prior to or at the time of permit issuance. In addition, this shield does not protect the source from any violations that occur as a result of any modifications or reconstruction on which construction commenced prior to permit issuance.

No requirements have been specifically identified as non-applicable for this facility.

#### 2. General Conditions

Compliance with this Operating Permit shall be deemed compliance with all applicable requirements specifically identified in the permit and other requirements specifically identified in the permit as not applicable to the source. This permit shield shall not alter or affect the following:

- 2.1 The provisions of §§ 25-7-112 and 25-7-113, C.R.S., or § 303 of the federal act, concerning enforcement in cases of emergency;
- 2.2 The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- 2.3 The applicable requirements of the federal Acid Rain Program, consistent with § 408(a) of the federal act;
- 2.4 The ability of the Air Pollution Control Division to obtain information from a source pursuant to § 25-7-111(2)(I), C.R.S., or the ability of the Administrator to obtain information pursuant to § 114 of the federal act;
- 2.5 The ability of the Air Pollution Control Division to reopen the Operating Permit for cause pursuant to Regulation No. 3, Part C, § XIII.
- 2.6 Sources are not shielded from terms and conditions that become applicable to the source subsequent to permit issuance.

## 3. Stream-lined Conditions

The following applicable requirements have been subsumed within this operating permit using the pertinent streamlining procedures approved by the U.S. EPA. For purposes of the permit shield,

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compliance with the listed permit conditions will also serve as a compliance demonstration for purposes of the associated subsumed requirements.

No applicable requirements were streamlined out of this permit.

#### **SECTION IV - General Permit Conditions**

#### 1. Administrative Changes

### Regulation No. 3, 5 CCR 1001-5, Part A, § III.

The permittee shall submit an application for an administrative permit amendment to the Division for those permit changes that are described in Regulation No. 3, Part A, § I.B.1. The permittee may immediately make the change upon submission of the application to the Division.

### 2. Certification Requirements

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.9., V.C.16.a.& e. and V.C.17.

- a. Any application, report, document and compliance certification submitted to the Air Pollution Control Division pursuant to Regulation No. 3 or the Operating Permit shall contain a certification by a responsible official of the truth, accuracy and completeness of such form, report or certification stating that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
- b. All compliance certifications for terms and conditions in the Operating Permit shall be submitted to the Air Pollution Control Division at least annually unless a more frequent period is specified in the applicable requirement or by the Division in the Operating Permit.
- c. Compliance certifications shall contain:
  - (i) the identification of each permit term and condition that is the basis of the certification;
  - (ii) the compliance status of the source;
  - (iii) whether compliance was continuous or intermittent;
  - (iv) method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - (v) such other facts as the Air Pollution Control Division may require to determine the compliance status of the source.
- d. All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.
- e. If the permittee is required to develop and register a risk management plan pursuant to § 112(r) of the federal act, the permittee shall certify its compliance with that requirement; the Operating Permit shall not incorporate the contents of the risk management plan as a permit term or condition.

#### 3. Common Provisions

### Common Provisions Regulation, 5 CCR 1001-2 §§ II.A., II.B., II.C., II, E., II.F., II.I, and II.J

a. To Control Emissions Leaving Colorado

When emissions generated from sources in Colorado cross the State boundary line, such emissions shall not cause the air quality standards of the receiving State to be exceeded, provided reciprocal action is taken by the receiving State.

#### b. **Emission Monitoring Requirements**

The Division may require owners or operators of stationary air pollution sources to install, maintain, and use instrumentation to monitor and record emission data as a basis for periodic reports to the Division.

#### c. Performance Testing

The owner or operator of any air pollution source shall, upon request of the Division, conduct performance test(s) and furnish the Division a written report of the results of such test(s) in order to determine compliance with applicable emission control regulations.

Performance test(s) shall be conducted and the data reduced in accordance with the applicable reference test methods unless the Division:

- (i) specifies or approves, in specific cases, the use of a test method with minor changes in methodology;
- (ii) approves the use of an equivalent method;
- (iii) approves the use of an alternative method the results of which the Division has determined to be adequate for indicating where a specific source is in compliance; or
- (iv) waives the requirement for performance test(s) because the owner or operator of a source has demonstrated by other means to the Division's satisfaction that the affected facility is in compliance with the standard. Nothing in this paragraph shall be construed to abrogate the Commission's or Division's authority to require testing under the Colorado Revised Statutes, Title 25, Article 7, and pursuant to regulations promulgated by the Commission.

Compliance test(s) shall be conducted under such conditions as the Division shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Division such records as may be necessary to determine the conditions of the performance test(s). Operations during period of startup, shutdown, and malfunction shall not constitute representative conditions of performance test(s) unless otherwise specified in the applicable standard.

The owner or operator of an affected facility shall provide the Division thirty days prior notice of the performance test to afford the Division the opportunity to have an observer present. The Division may waive the thirty day notice requirement provided that arrangements satisfactory to the Division are made for earlier testing.

The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

- i. Sampling ports adequate for test methods applicable to such facility;
- (v) Safe sampling platform(s);
- (vi) Safe access to sampling platform(s); and
- Utilities for sampling and testing equipment. (vii)

Each performance test shall consist of at least three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic mean of results of at least three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Division's approval, be determined using the arithmetic mean of the results of the two other runs.

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Nothing in this section shall abrogate the Division's authority to conduct its own performance test(s) if so warranted.

#### d. **Upset Conditions and Breakdowns**

Upset conditions, as defined, shall not be deemed to be in violation of the Colorado regulations, provided that the Division is notified as soon as possible, but no later than two (2) hours after the start of the next working day, followed by a written notice to the Division explaining the cause of the occurrence and that proper action has been or is being taken to correct the conditions causing the violation and to prevent such excess emission in the future.

#### e. Circumvention Clause

A person shall not build, erect, install, or use any article, machine, equipment, condition, or any contrivance, the use of which, without resulting in a reduction in the total release of air pollutants to the atmosphere, reduces or conceals an emission which would otherwise constitute a violation of this regulation. No person shall circumvent this regulation by using more openings than is considered normal practice by the industry or activity in question.

#### f. **Compliance Certifications**

For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in the Colorado State Implementation Plan, nothing in the Colorado State Implementation Plan shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed. Evidence that has the effect of making any relevant standard or permit term more stringent shall not be credible for proving a violation of the standard or permit term.

When compliance or non-compliance is demonstrated by a test or procedure provided by permit or other applicable requirement, the owner or operator shall be presumed to be in compliance or non-compliance unless other relevant credible evidence overcomes that presumption.

#### Affirmative Defense Provision for Excess Emissions During Startup and Shutdown g.

Note that until such time as the U.S. EPA approves this provision into the Colorado State Implementation Plan (SIP), it shall apply only to State-Only permit terms and conditions and shall be enforceable only by the State.

An affirmative defense is provided to owners and operators for civil penalty actions for excess emissions during periods of startup and shutdown. To establish the affirmative defense and to be relieved of a civil penalty in any action to enforce an applicable requirement, the owner or operator of the facility must meet the notification requirements below in a timely manner and prove by a preponderance of the evidence that:

- (i) The periods of excess emissions that occurred during startup and shutdown were short and infrequent and could not have been prevented through careful planning and design;
- (ii) The excess emissions were not part of a recurring pattern indicative of inadequate design, operation or maintenance;
- (iii) If the excess emissions were caused by a bypass (an intentional diversion of control equipment), then the bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;
- (iv) The frequency and duration of operation in startup and shutdown periods were minimized to the maximum extent practicable;
- (v) All possible steps were taken to minimize the impact of excess emissions on ambient air quality;
- All emissions monitoring systems were kept in operation (if at all possible); (vi)

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- The owner or operator's actions during the period of excess emissions were documented by properly (vii) signed, contemporaneous operating logs or other relevant evidence; and,
- At all times, the facility was operated in a manner consistent with good practices for minimizing emissions. (viii) This subparagraph is intended solely to be a factor in determining whether an affirmative defense is available to an owner or operator, and shall not constitute an additional applicable requirement.

The owner or operator of the facility experiencing excess emissions during startup and shutdown shall notify the Division verbally as soon as possible, but no later than two (2) hours after the start of the next working day, and shall submit written quarterly notification following the initial occurrence of the excess emissions. The notification shall address the criteria set forth above.

The Affirmative Defense Provision contained in this section shall not be available to claims for injunctive relief.

The Affirmative Defense Provision does not apply to State Implementation Plan provisions or other requirements that derive from new source performance standards or national emissions standards for hazardous air pollutants, or any other federally enforceable performance standard or emission limit with an averaging time greater than twenty-four hours. In addition, an affirmative defense cannot be used by a single source or small group of sources where the excess emissions have the potential to cause an exceedance of the ambient air quality standards or Prevention of Significant Deterioration (PSD) increments.

In making any determination whether a source established an affirmative defense, the Division shall consider the information within the notification required above and any other information the Division deems necessary, which may include, but is not limited to, physical inspection of the facility and review of documentation pertaining to the maintenance and operation of process and air pollution control equipment.

#### **Compliance Requirements** 4.

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.C.9., V.C.11. & 16.d. and § 25-7-122.1(2), C.R.S.

- The permittee must comply with all conditions of the Operating Permit. Any permit noncompliance relating to federally-enforceable terms or conditions constitutes a violation of the federal act, as well as the state act and Regulation No. 3. Any permit noncompliance relating to state-only terms or conditions constitutes a violation of the state act and Regulation No. 3, shall be enforceable pursuant to state law, and shall not be enforceable by citizens under § 304 of the federal act. Any such violation of the federal act, the state act or regulations implementing either statute is grounds for enforcement action, for permit termination, revocation and reissuance or modification or for denial of a permit renewal application.
- b. It shall not be a defense for a permittee in an enforcement action or a consideration in favor of a permittee in a permit termination, revocation or modification action or action denying a permit renewal application that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit.
- The permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of any request by c. the permittee for a permit modification, revocation and reissuance, or termination, or any notification of planned changes or anticipated noncompliance does not stay any permit condition, except as provided in §§ X. and XI. of Regulation No. 3, Part C.
- The permittee shall furnish to the Air Pollution Control Division, within a reasonable time as specified by the d. Division, any information that the Division may request in writing to determine whether cause exists for modifying. revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Division copies of records required to be kept by the permittee, including

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information claimed to be confidential. Any information subject to a claim of confidentiality shall be specifically identified and submitted separately from information not subject to the claim.

- Any schedule for compliance for applicable requirements with which the source is not in compliance at the time of e. permit issuance shall be supplemental, and shall not sanction noncompliance with, the applicable requirements on which it is based.
- f. For any compliance schedule for applicable requirements with which the source is not in compliance at the time of permit issuance, the permittee shall submit, at least every 6 months unless a more frequent period is specified in the applicable requirement or by the Air Pollution Control Division, progress reports which contain the following:
  - dates for achieving the activities, milestones, or compliance required in the schedule for compliance, and (i) dates when such activities, milestones, or compliance were achieved; and
  - (ii) an explanation of why any dates in the schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.
- The permittee shall not knowingly falsify, tamper with, or render inaccurate any monitoring device or method g. required to be maintained or followed under the terms and conditions of the Operating Permit.

#### 5. **Emergency Provisions**

#### Regulation No. 3, 5 CCR 1001-5, Part C, § VII.

An emergency means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed the technology-based emission limitation under the permit due to unavoidable increases in emissions attributable to the emergency. "Emergency" does not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error. An emergency constitutes an affirmative defense to an enforcement action brought for noncompliance with a technology-based emission limitation if the permittee demonstrates, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- an emergency occurred and that the permittee can identify the cause(s) of the emergency; a
- the permitted facility was at the time being properly operated; b.
- during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that c. exceeded the emission standards, or other requirements in the permit; and
- d. the permittee submitted oral notice of the emergency to the Air Pollution Control Division no later than noon of the next working day following the emergency, and followed by written notice within one month of the time when emissions limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

This emergency provision is in addition to any emergency or upset provision contained in any applicable requirement.

#### 6. **Emission Standards for Asbestos**

## Regulation No. 8, 5 CCR 1001-10, Part B

The permittee shall not conduct any asbestos abatement activities except in accordance with the provisions of Regulation No. 8, Part B, "emission standards for asbestos."

#### 7. **Emissions Trading, Marketable Permits, Economic Incentives**

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### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.13.

No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are specifically provided for in the permit.

#### 8. **Fee Payment**

#### C.R.S. §§ 25-7-114.1(6) and 25-7-114.7

- The permittee shall pay an annual emissions fee in accordance with the provisions of C.R.S. § 25-7-114.7. A 1% per month late payment fee shall be assessed against any invoice amounts not paid in full on the 91st day after the date of invoice, unless a permittee has filed a timely protest to the invoice amount.
- The permittee shall pay a permit processing fee in accordance with the provisions of C.R.S. § 25-7-114.7. If the b. Division estimates that processing of the permit will take more than 30 hours, it will notify the permittee of its estimate of what the actual charges may be prior to commencing any work exceeding the 30 hour limit.
- The permittee shall pay an APEN fee in accordance with the provisions of C.R.S. § 25-7-114.1(6) for each APEN or c. revised APEN filed.

#### 9. **Fugitive Particulate Emissions**

#### Regulation No. 1, 5 CCR 1001-3, § III.D.1.

The permittee shall employ such control measures and operating procedures as are necessary to minimize fugitive particulate emissions into the atmosphere, in accordance with the provisions of Regulation No. 1, § III.D.1.

#### 10. **Inspection and Entry**

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.16.b.

Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Air Pollution Control Division, or any authorized representative, to perform the following:

- a. enter upon the permittee's premises where an Operating Permit source is located, or emissions-related activity is conducted, or where records must be kept under the terms of the permit;
- b. have access to, and copy, at reasonable times, any records that must be kept under the conditions of the permit;
- inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), c. practices, or operations regulated or required under the Operating Permit;
- sample or monitor at reasonable times, for the purposes of assuring compliance with the Operating Permit or d. applicable requirements, any substances or parameters.

#### 11. **Minor Permit Modifications**

#### Regulation No. 3, 5 CCR 1001-5, Part C, §§ X. & XI.

The permittee shall submit an application for a minor permit modification before making the change requested in the application. The permit shield shall not extend to minor permit modifications.

#### 12. **New Source Review**

### Regulation No. 3, 5 CCR 1001-5, Part B

The permittee shall not commence construction or modification of a source required to be reviewed under the New Source Review provisions of Regulation No. 3, Part B, without first receiving a construction permit.

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#### 13. No Property Rights Conveyed

### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.11.d.

This permit does not convey any property rights of any sort, or any exclusive privilege.

#### 14. Odor

#### Regulation No. 2, 5 CCR 1001-4, Part A

As a matter of state law only, the permittee shall comply with the provisions of Regulation No. 2 concerning odorous emissions.

#### 15. **Off-Permit Changes to the Source**

### Regulation No. 3, 5 CCR 1001-5, Part C, § XII.B.

The permittee shall record any off-permit change to the source that causes the emissions of a regulated pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from the change, including any other data necessary to show compliance with applicable ambient air quality standards. The permittee shall provide contemporaneous notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permit shield shall not apply to any off-permit change.

#### 16. **Opacity**

#### Regulation No. 1, 5 CCR 1001-3, §§ I., II.

The permittee shall comply with the opacity emissions limitation set forth in Regulation No. 1, §§ I.-II.

#### 17. **Open Burning**

#### Regulation No. 9, 5 CCR 1001-11

The permittee shall obtain a permit from the Division for any regulated open burning activities in accordance with provisions of Regulation No. 9.

#### 18. **Ozone Depleting Compounds**

#### Regulation No. 15, 5 CCR 1001-17

The permittee shall comply with the provisions of Regulation No. 15 concerning emissions of ozone depleting compounds. Sections I., II.C., II.D., III. IV., and V. of Regulation No. 15 shall be enforced as a matter of state law only.

#### 19. **Permit Expiration and Renewal**

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ III.B.6., IV.C., V.C.2.

- The permit term shall be five (5) years. The permit shall expire at the end of its term. Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted.
- b. Applications for renewal shall be submitted at least twelve months, but not more than 18 months, prior to the expiration of the Operating Permit. An application for permit renewal may address only those portions of the permit that require revision, supplementing, or deletion, incorporating the remaining permit terms by reference from the previous permit. A copy of any materials incorporated by reference must be included with the application.

#### 20. **Portable Sources**

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### Regulation No. 3, 5 CCR 1001-5, Part C, § II.D.

Portable Source permittees shall notify the Air Pollution Control Division at least 10 days in advance of each change in location.

#### 21. Prompt Deviation Reporting

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.7.b.

The permittee shall promptly report any deviation from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken. Unless required by a permit term or condition to report deviations on a more frequent basis, "prompt" reporting shall entail submission of reports of deviations from permit requirements every six (6) months in accordance with paragraph 22.d. below. "Prompt reporting" does not constitute an exception to the requirements of "Emergency Provisions" for the purpose of avoiding enforcement actions.

### 22. Record Keeping and Reporting Requirements

## Regulation No. 3, 5 CCR 1001-5, Part A, § II.; Part C, §§ V.C.6., V.C.7.

- a. Unless otherwise provided in the source specific conditions of this Operating Permit, the permittee shall maintain compliance monitoring records that include the following information:
  - (i) date, place as defined in the Operating Permit, and time of sampling or measurements;
  - (ii) date(s) on which analyses were performed;
  - (iii) the company or entity that performed the analysis;
  - (iv) the analytical techniques or methods used;
  - (v) the results of such analysis; and
  - (vi) the operating conditions at the time of sampling or measurement.
- b. The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application. Support information, for this purpose, includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Operating Permit. With prior approval of the Air Pollution Control Division, the permittee may maintain any of the above records in a computerized form.
- c. Permittees must retain records of all required monitoring data and support information for the most recent twelve (12) month period, as well as compliance certifications for the past five (5) years on-site at all times. A permittee shall make available for the Air Pollution Control Division's review all other records of required monitoring data and support information required to be retained by the permittee upon 48 hours advance notice by the Division.
- d. The permittee shall submit to the Air Pollution Control Division all reports of any required monitoring at least every six (6) months, unless an applicable requirement, the enhanced monitoring rule, or the Division requires submission on a more frequent basis. All instances of deviations from any permit requirements must be clearly identified in such reports.
- e. The permittee shall file an Air Pollutant Emissions Notice ("APEN") prior to constructing, modifying, or altering any facility, process, activity which constitutes a stationary source from which air pollutants are or are to be emitted, unless such source is exempt from the APEN filing requirements of Regulation No. 3, Part A, § II.D. A revised APEN shall be filed annually whenever a significant change in emissions, as defined in Regulation No. 3, Part A, § II.C.2., occurs; whenever there is a change in owner or operator of any facility, process, or activity; whenever new control equipment is installed; whenever a different type of control equipment replaces an existing type of control

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equipment; whenever a permit limitation must be modified; or before the APEN expires. An APEN is valid for a period of five years. The five-year period recommences when a revised APEN is received by the Air Pollution Control Division. Revised APENs shall be submitted no later than 30 days before the five-year term expires. Permittees submitting revised APENs to inform the Division of a change in actual emission rates must do so by April 30 of the following year. Where a permit revision is required, the revised APEN must be filed along with a request for permit revision. APENs for changes in control equipment must be submitted before the change occurs. Annual fees are based on the most recent APEN on file with the Division.

### 23. Reopenings for Cause

#### Regulation No. 3, 5 CCR 1001-5, Part C, § XIII.

- a. The Air Pollution Control Division shall reopen, revise, and reissue Operating Permits; permit reopenings and reissuance shall be processed using the procedures set forth in Regulation No. 3, Part C, § III., except that proceedings to reopen and reissue permits affect only those parts of the permit for which cause to reopen exists.
- b. The Division shall reopen a permit whenever additional applicable requirements become applicable to a major source with a remaining permit term of three or more years, unless the effective date of the requirements is later than the date on which the permit expires, or unless a general permit is obtained to address the new requirements; whenever additional requirements (including excess emissions requirements) become applicable to an affected source under the acid rain program; whenever the Division determines the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit; or whenever the Division determines that the permit must be revised or revoked to assure compliance with an applicable requirement.
- c. The Division shall provide 30 days' advance notice to the permittee of its intent to reopen the permit, except that a shorter notice may be provided in the case of an emergency.
- d. The permit shield shall extend to those parts of the permit that have been changed pursuant to the reopening and reissuance procedure.

### **24.** Section 502(b)(10) Changes

## Regulation No. 3, 5 CCR 1001-5, Part C, § XII.A.

The permittee shall provide a minimum 7-day advance notification to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit. The permittee shall attach a copy of each such notice given to its Operating Permit.

#### 25. Severability Clause

#### Regulation No. 3, 5 CCR 1001-5, Part C, § V.C.10.

In the event of a challenge to any portion of the permit, all emissions limits, specific and general conditions, monitoring, record keeping and reporting requirements of the permit, except those being challenged, remain valid and enforceable.

#### 26. Significant Permit Modifications

### Regulation No. 3, 5 CCR 1001-5, Part C, §III.B.2.

The permittee shall not make a significant modification required to be reviewed under Regulation No. 3, Part B ("Construction Permit" requirements) without first receiving a construction permit. The permittee shall submit a complete Operating Permit application or application for an Operating Permit revision for any new or modified source within twelve months of commencing operation, to the address listed in Item 1 in Appendix D of this permit. If the permittee chooses to use the "Combined Construction/Operating Permit" application procedures of Regulation No. 3, Part C, then the Operating Permit must be received prior to commencing construction of the new or modified source.

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### 27. Special Provisions Concerning the Acid Rain Program

### Regulation No. 3, 5 CCR 1001-5, Part C, §§ V.C.1.b. & 8

- a. Where an applicable requirement of the federal act is more stringent than an applicable requirement of regulations promulgated under Title IV of the federal act, 40 Code of Federal Regulations (CFR) Part 72, both provisions shall be incorporated into the permit and shall be federally enforceable.
- b. Emissions exceeding any allowances that the source lawfully holds under Title IV of the federal act or the regulations promulgated thereunder, 40 CFR Part 72, are expressly prohibited.

### 28. Transfer or Assignment of Ownership

### Regulation No. 3, 5 CCR 1001-5, Part C, § II.C.

No transfer or assignment of ownership of the Operating Permit source will be effective unless the prospective owner or operator applies to the Air Pollution Control Division on Division-supplied Administrative Permit Amendment forms, for reissuance of the existing Operating Permit. No administrative permit shall be complete until a written agreement containing a specific date for transfer of permit, responsibility, coverage, and liability between the permittee and the prospective owner or operator has been submitted to the Division.

### 29. Volatile Organic Compounds

#### Regulation No. 7, 5 CCR 1001-9, §§ III & V.

a. For sources located in an ozone non-attainment area or the Denver Metro Attainment Maintenance Area, all storage tank gauging devices, anti-rotation devices, accesses, seals, hatches, roof drainage systems, support structures, and pressure relief valves shall be maintained and operated to prevent detectable vapor loss except when opened, actuated, or used for necessary and proper activities (e.g. maintenance). Such opening, actuation, or use shall be limited so as to minimize vapor loss.

Detectable vapor loss shall be determined visually, by touch, by presence of odor, or using a portable hydrocarbon analyzer. When an analyzer is used, detectable vapor loss means a VOC concentration exceeding 10,000 ppm. Testing shall be conducted as in Regulation No. 7, Section VIII.C.3.

Except when otherwise provided by Regulation No. 7, all volatile organic compounds, excluding petroleum liquids, transferred to any tank, container, or vehicle compartment with a capacity exceeding 212 liters (56 gallons), shall be transferred using submerged or bottom filling equipment. For top loading, the fill tube shall reach within six inches of the bottom of the tank compartment. For bottom-fill operations, the inlet shall be flush with the tank bottom.

- b. The permittee shall not dispose of volatile organic compounds by evaporation or spillage unless Reasonably Available Control Technology (RACT) is utilized.
- c. No owner or operator of a bulk gasoline terminal, bulk gasoline plant, or gasoline dispensing facility as defined in Colorado Regulation No. 7, Section VI, shall permit gasoline to be intentionally spilled, discarded in sewers, stored in open containers, or disposed of in any other manner that would result in evaporation.

#### 30. Wood Stoves and Wood burning Appliances

### Regulation No. 4, 5 CCR 1001-6

The permittee shall comply with the provisions of Regulation No. 4 concerning the advertisement, sale, installation, and use of wood stoves and wood burning appliances.

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# **OPERATING PERMIT APPENDICES**

- A INSPECTION INFORMATION
- **B-MONITORING AND PERMIT DEVIATION REPORT**
- C COMPLIANCE CERTIFICATION REPORT
- D NOTIFICATION ADDRESSES
- **E PERMIT ACRONYMS**
- F PERMIT MODIFICATIONS

## \*DISCLAIMER:

None of the information found in these Appendices shall be considered to be State or Federally enforceable, except as otherwise provided in the permit, and is presented to assist the source, permitting authority, inspectors, and citizens.

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## **APPENDIX A - Inspection Information**

#### **Directions to Plant**:

The plant is on the east edge of town at 1925 East Main.

## **Safety Equipment Required:**

Hard Hat, Ear Protection

### **Facility Plot Plan:**

Figure 1 shows the plot plan as submitted on September 8, 1998 with the source's Title V Operating Permit Application.

## **List of Insignificant Activities**:

The following list of insignificant activities was provided by the source to assist in the understanding of the facility layout. Since there is no requirement to update such a list, activities may have changed since the last filing.

Insignificant activities and/or sources of emissions as submitted in the application are as follows:

- Battery storage area
- Landscaping activities and equipment
- Cat engine valve cover vents and crankcase vents
- Welding operations
- Janitorial activities
- Office emissions
- Cooling tower
- Motor vehicle tailpipe emissions
- Misc. chemical storage
- Oil drum storage
- Closed lube oil systems
- Portable cutting torches
- Ash pond
- Four AST diesel fuel storage tanks (1 @ 200,000 gal, 2 @ 20,000 gal, 1 @ 22,000 gal)

In addition to the above specific insignificant activities, the following generic activities are identified:

- Chemical storage tanks or containers that hold less than five hundred gallons, and that have an annual average throughput less than twenty-five gallons per day.
- Landscaping and site housekeeping devices equal to or less than ten horsepower in size.
- Chemical storage areas where chemicals are stored in closed containers, and where total storage capacity does not exceed five thousand gallons. This exemption applies solely to storage of such chemicals. This exemption does not apply to transfer of chemicals from, to, or between such containers.

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- Storage of butane, propane, or liquefied petroleum gas in a vessel with a capacity of less than sixty thousand gallons, provided the requirements of Regulation No. 7, Section IV are met, where applicable.
- Storage tanks of capacity less than forty thousand gallons of lubricating oils or waste lubricating oils.
- Each individual piece of fuel burning equipment that uses gaseous fuel, and that has a design rate less than or equal to ten million BTU per hour, and that is used solely for heating buildings for personal comfort.
- Air pollution emission units, operations or activities with emissions less than the appropriate de minimis reporting
- Storage tanks meeting all of the following criteria:
  - Annual throughput is less than four hundred thousand gallons
  - The liquid stored is one of the following
    - Diesel fuels 1 D, 2 D, or 4 6
    - Fuel oils #1 #6
    - As turbine fuels 1 GT through 4 GT
    - An oil/water mixture with a vapor pressure less than or equal to that of diesel fuel (RVP 0.025

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#### APPENDIX B

### **Reporting Requirements and Definitions**

with codes ver 12/21/04

Please note that, pursuant to 113(c)(2) of the federal Clean Air Act, any person who knowingly:

- (A) makes any false material statement, representation, or certification in, or omits material information from, or knowingly alters, conceals, or fails to file or maintain any notice, application, record, report, plan, or other document required pursuant to the Act to be either filed or maintained (whether with respect to the requirements imposed by the Administrator or by a State);
- (B) fails to notify or report as required under the Act; or
- (C) falsifies, tampers with, renders inaccurate, or fails to install any monitoring device or method required to be maintained or followed under the Act shall, upon conviction, be punished by a fine pursuant to title 18 of the United States Code, or by imprisonment for not more than 2 years, or both. If a conviction of any person under this paragraph is for a violation committed after a first conviction of such person under this paragraph, the maximum punishment shall be doubled with respect to both the fine and imprisonment.

The permittee must comply with all conditions of this operating permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

The Part 70 Operating Permit program requires three types of reports to be filed for all permits. All required reports must be certified by a responsible official.

### **Report #1: Monitoring Deviation Report** (due at least every six months)

For purposes of this operating permit, the Division is requiring that the monitoring reports are due every six months unless otherwise noted in the permit. All instances of deviations from permit monitoring requirements must be clearly identified in such reports.

For purposes of this operating permit, monitoring means any condition determined by observation, by data from any monitoring protocol, or by any other monitoring which is required by the permit as well as the recordkeeping associated with that monitoring. This would include, for example, fuel use or process rate monitoring, fuel analyses, and operational or control device parameter monitoring.

## **Report #2: Permit Deviation Report (must be reported "promptly")**

In addition to the monitoring requirements set forth in the permits as discussed above, each and every requirement of the permit is subject to deviation reporting. The reports must address deviations from permit requirements, including those attributable to upset conditions and malfunctions as defined in this Appendix, the probable cause of such deviations, and any corrective actions or preventive measures taken. All deviations from

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any term or condition of the permit are required to be summarized or referenced in the annual compliance certification.

For purposes of this operating permit, "upset" shall refer to both emergency conditions and upsets. Additional discussion on these conditions is provided later in this Appendix.

For purposes of this operating permit, the Division is requiring that the permit deviation reports are due every six months unless otherwise noted in the permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. For example, quarterly Excess Emission Reports required by an NSPS or Regulation No. 1, Section IV.

In addition to the monitoring deviations discussed above, included in the meaning of deviation for the purposes of this operating permit are any of the following:

- (1) A situation where emissions exceed an emission limitation or standard contained in the permit;
- (2) A situation where process or control device parameter values demonstrate that an emission limitation or standard contained in the permit has not been met;
- (3) A situation in which observations or data collected demonstrates noncompliance with an emission limitation or standard or any work practice or operating condition required by the permit; or,
- (4) A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only if the emission point is subject to CAM)

For reporting purposes, the Division has combined the Monitoring Deviation Report with the Permit Deviation Report. All deviations shall be reported using the following codes:

1 = Standard: When the requirement is an emission limit or standard 2 = Process: When the requirement is a production/process limit

**3 = Monitor:** When the requirement is monitoring **4 = Test:** When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

**8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

**9 = Other:** When the deviation is not covered by any of the above categories

### Report #3: Compliance Certification (annually, as defined in the permit)

Submission of compliance certifications with terms and conditions in the permit, including emission limitations, standards, or work practices, is required not less than annually.

First Issued: November 1, 1999 Renewed: November 1, 2005 Compliance Certifications are intended to state the compliance status of each requirement of the permit over the certification period. They must be based, at a minimum, on the testing and monitoring methods specified in the permit that were conducted during the relevant time period. In addition, if the owner or operator knows of other material information (i.e. information beyond required monitoring that has been specifically assessed in relation to how the information potentially affects compliance status), that information must be identified and addressed in the compliance certification. The compliance certification must include the following:

- The identification of each term or condition of the permit that is the basis of the certification;
- The identification of the method(s) or other means used by the owner or operator for determining the compliance status with each permit term and condition during the certification period and whether such methods or other means provide continuous or intermittent data. Such methods and other means shall include, at a minimum, the methods and means required in the permit. If necessary, the owner or operator also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Federal Clean Air Act, which prohibits knowingly making a false certification or omitting material information;
- The status of compliance with the terms and conditions of the permit, and whether compliance was continuous or intermittent. The certification shall identify each deviation and take it into account in the compliance certification. Note that not all deviations are considered violations.<sup>1</sup>
- Such other facts as the Division may require, consistent with the applicable requirements to which the source is subject, to determine the compliance status of the source.

The Certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40CFR Part 64 (the Compliance Assurance Monitoring (CAM) Rule) has occurred. (only for emission points subject to CAM)

Note the requirement that the certification shall identify each deviation and take it into account in the compliance certification. Previously submitted deviation reports, including the deviation report submitted at the time of the annual certification, may be referenced in the compliance certification.

For example, given the various emissions limitations and monitoring requirements to which a source may be

standard where the source adequately shows that any potential deviations as a result of these infrequent periods were minimized to the extent practicable and could not have been prevented through careful planning, design,

or were unavoidable to prevent loss of life, personal injury, or severe property damage.

subject, a deviation from one requirement may not be a deviation under another requirement which recognizes an exception and/or special circumstances relating to that same event. Further, periods of excess emissions during startup, shutdown and malfunction may not be found to be a violation of an emission limitation or

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## Startup, Shutdown, Malfunctions, Emergencies, and Upsets

Understanding the application of Startup, Shutdown, Malfunctions, Emergency provisions, and the Upset provisions is very important in both the deviation reports and the annual compliance certifications.

### Startup, Shutdown, and Malfunctions

Please note that exceedances of some New Source Performance Standards (NSPS) and Maximum Achievable Control Technology (MACT) standards that occur during Startup, Shutdown or Malfunctions may not be considered to be non-compliance since emission limits or standards often do not apply unless specifically stated in the NSPS. Such exceedances must, however, be reported as excess emissions per the NSPS/MACT rules and would still be noted in the deviation report. In regard to compliance certifications, the permittee should be confident of the information related to those deviations when making compliance determinations since they are subject to Division review. The concepts of Startup, Shutdown and Malfunctions also exist for Best Available Control Technology (BACT) sources, but are not applied in the same fashion as for NSPS and MACT sources.

### **Emergencies and Upsets**

Under the Emergency provisions of Part 70 and the Upset provisions of the State regulations, certain operational conditions may act as an affirmative defense against enforcement action if they are properly reported.

### **DEFINITIONS**

**Malfunction** (NSPS) means any sudden, infrequent, and not reasonably preventable failure of air pollution control equipment, process equipment, or a process to operate in a normal or usual manner. Failures that are caused in part by poor maintenance or careless operation are not malfunctions.

**Malfunction** (SIP) means any sudden and unavoidable failure of air pollution control equipment or process equipment or unintended failure of a process to operate in a normal or usual manner. Failures that are primarily caused by poor maintenance, careless operation, or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

**Emergency** means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

**Upset** means an unpredictable failure of air pollution control or process equipment which results in the violation of emission control regulations and which is not due to poor maintenance, improper or careless operations, or is otherwise preventable through exercise of reasonable care.

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## **APPENDIX B: Monitoring and Permit Deviation Report - Part I**

- 1. Following is the **required** format for the Monitoring and Permit Deviation report to be submitted to the Division on a semi-annual basis unless otherwise noted in the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.
- 2. Part II of this Appendix B shows the format and information the Division will require for describing periods of monitoring and permit deviations, or upset or emergency conditions as indicated in the Table below. One Part II Form must be completed for each Deviation. Previously submitted reports (e.g. EER's or Upsets) may be referenced and the form need not be filled out in its entirety.

FACILITY NAME: Trinidad Municipal Power P	lant
OPERATING PERMIT NO: 95OPLA070	
REPORTING PERIOD:	(see first page of the permit for specific reporting period and
dates)	

Operating Permit Unit		Deviations noted During Period? <sup>1</sup>		Deviation Code <sup>2</sup>	Upset/Emergency Condition Reported During Period?		
ID	Unit Description	YES	NO		YES	NO	
S001	Unit #1: Combustion Engineers Type VU Coal-fired overfeed stoker/traveling grate boiler SN 15753						
S002	Unit #2: Combustion Engineers Type VU Natural gas-fired boiler SN 15751						
S003	Unit #3: Enterprise IC Engine Model DGSR-38 SN 65025; Diesel or Diesel/Natural Gas Fired						
S004	Unit #4: Enterprise IC Engine Model DGSR-38 SN 65024; Diesel or Diesel/Natural Gas Fired						
S008	Unit #5: Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN- 00-640						
S009	Unit #6: Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN- 00-639						
S010	Unit #7: Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN- 00-638						
S005	Coal Handling and Storage Fugitive Emissions						
S006	Ash Storage Silo Vent						
S007	Ash Silo Loadout Fugitive Emissions						
General Conditions							
Insignificant Activities							

First Issued: November 1, 1999 Renewed: November 1, 2005 1 = **Standard:** When the requirement is an emission limit or standard **2 = Process:** When the requirement is a production/process limit

3 = Monitor: When the requirement is monitoring 4 = Test: When the requirement is testing

5 = Maintenance: When required maintenance is not performed
 6 = Record: When the requirement is recordkeeping
 7 = Report: When the requirement is reporting

**8 = CAM:** A situation in which an excursion or exceedance as defined in 40CFR Part 64 (the

Compliance Assurance Monitoring (CAM) Rule) has occurred.

**9 = Other:** When the deviation is not covered by any of the above categories

<sup>&</sup>lt;sup>1</sup> See previous discussion regarding what is considered to be a deviation. Determination of whether or not a deviation has occurred shall be based on a reasonable inquiry using readily available information.

<sup>&</sup>lt;sup>2</sup> Use the following entries, as appropriate

## **APPENDIX B: Monitoring and Permit Deviation Report - Part II**

FACILITY NAME: Trinidad Municipal Po OPERATING PERMIT NO: 95OPLA070 REPORTING PERIOD:	ower Plant		
Is the deviation being claimed as an:	Emergency	Upset	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup	Shutdown	Malfunction
	Normal Operation		
OPERATING PERMIT UNIT IDENTIFICATION:			
Operating Permit Condition Number Citation			
Explanation of Period of Deviation			
Duration (start/stop date & time)			
Action Taken to Correct the Problem			
Measures Taken to Prevent a Reoccurrence of the Pr	<u>roblem</u>		
Dates of Upsets/Emergencies Reported (if applicable	<u>e)</u>		
Deviation Code	Division Code QA:		

SEE EXAMPLE ON THE NEXT PAGE

Acme Corp.

FACILITY NAME:

## **EXAMPLE**

REPORTING PERMIT NO: 96OPZZXXX REPORTING PERIOD: 1/1/04 - 6/30/04				
Is the deviation being claimed as an:	Emergency	UpsetΣ	ΧX	N/A
(For NSPS/MACT) Did the deviation occur during:	Startup Normal Operation			
OPERATING PERMIT UNIT IDENTIFICATION:				
Asphalt Plant with a Scrubber for Particulate Contro	l - Unit XXX			
Operating Permit Condition Number Citation				
Section II, Condition 3.1 - Opacity Limitation				
Explanation of Period of Deviation				
Slurry Line Feed Plugged				
<u>Duration</u>				
START- 1730 4/10/96 END- 1800 4/10/96				
Action Taken to Correct the Problem				
Line Blown Out				
Measures Taken to Prevent Reoccurrence of the Pro	<u>olem</u>			
Replaced Line Filter				
Dates of Upsets/Emergencies Reported (if applicable	<u>e)</u>			
5/30/04 to A. Einstein, APCD				
Deviation Code	Division Code QA:			

## **APPENDIX B: Monitoring and Permit Deviation Report - Part III**

## REPORT CERTIFICATION

FACILITY IDENTIFICATION NUM	MBER: 0710005	
PERMIT NUMBER: 950PLA070		
REPORTING PERIOD:	(see first page of the permit for	specific reporting period and dates)
	ni-Annual Deviation Reports must be constant. 3, Part A, Section I.B.38. This sign submitted.	
STATEMENT OF COMPLETEN	ESS	
	being submitted in its entirety and, certify that the statements and inform	
1-501(6), C.R.S., makes any false i	utes state that any person who knowing material statement, representation, only be punished in accordance with the state of the state o	or certification in this document is
Printed or Typed Nam	le	Title
Printed or Typed Nam	ie	Title
Printed or Typed Nam Signature of Res		Date Signed

### APPENDIX C

## **Required Format for Annual Compliance Certification Reports**

Following is the format for the Compliance Certification report to be submitted to the Division and the U.S. EPA annually based on the effective date of the permit. The Table below must be completed for all equipment or processes for which specific Operating Permit terms exist.

FACILITY NAME: Trinidad Municipal Power Plant

OPERATING PERMIT NO: 950PLA070 REPORTING PERIOD:

## I. Facility Status

During the entire reporting period, this source was in compliance with <b>ALL</b> terms and cond	itions contained
in the Permit, each term and condition of which is identified and included by this reference.	The method(s)
used to determine compliance is/are the method(s) specified in the Permit.	

With the possible exception of the deviations identified in the table below, this source was in compliance with all terms and conditions contained in the Permit, each term and condition of which is identified and included by this reference, during the entire reporting period. The method used to determine compliance for each term and condition is the method specified in the Permit, unless otherwise indicated and described in the deviation report(s). Note that not all deviations are considered violations.

Operating Permit Unit ID	it Unit Unit Description		Unit Description Deviations Monitori Method premit?		d per	Was compliand interm	Was Data Continuous? <sup>4</sup>		
ID		Previous	Current	YES	NO	Continuous	Intermittent	YES	NO
S001	Unit #1: Combustion Engineers Type VU Coal- fired overfeed stoker/traveling grate boiler SN 15753								
S002	Unit #2: Combustion Engineers Type VU Natural gas-fired boiler SN 15751								
S003	Unit #3: Enterprise IC Engine Model DGSR-38 SN 65025; Diesel or Diesel/Natural Gas Fired								
S004	Unit #4: Enterprise IC Engine Model DGSR-38 SN 65024; Diesel or Diesel/Natural Gas Fired								

Operating Permit Unit ID	Unit Description	Devia Repor		Monit Metho Perm	d per	Was compliance continuous or intermittent? <sup>3</sup>		Was Data Continuous? <sup>4</sup>		
		Previous	Current	YES	NO	Continuous	Intermittent	YES	NO	
S008	Unit #5: Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN- 00-640									
S009	Unit #6: Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN- 00-639									
S010	Unit #7: Caterpillar diesel IC Engine Model 3516 DITA "B" series SN 7RN- 00-638									
S005	Coal Handling and Storage Fugitive Emissions									
S006	Ash Storage Silo Vent									
S007	Ash Silo Loadout Fugitive Emissions									
General Conditions										
Insignificant Activities <sup>5</sup>										

<sup>&</sup>lt;sup>1</sup> If deviations were noted in the previous deviation report (i.e. for the first six months of the annual reporting period), put an "X" under "previous". If deviations were noted in the current deviation report (i.e. for the last six months of the annual reporting period), put an "X" under "current". Mark both columns if both apply.

#### NOTE:

The Periodic Monitoring requirements of the Operating Permit program rule are intended to provide assurance that even in the absence of a continuous system of monitoring the Title V source can demonstrate whether it has operated in continuous compliance for the duration of the reporting period. Therefore, if a source 1) conducts all of the monitoring and recordkeeping required in its permit, even if such activities are done periodically and not continuously, and if 2) such monitoring and recordkeeping does not indicate non-compliance, and if 3) the Responsible Official is not aware of any credible evidence that indicates non-compliance, then the Responsible Official can certify that the emission point(s) in question were in continuous compliance during the applicable time period.

<sup>&</sup>lt;sup>2</sup> Note whether the method(s) used to determine the compliance status with each term and condition was the method(s) specified in the permit. If it was not, mark "no" and attach additional information/explanation.

<sup>&</sup>lt;sup>3</sup> Note whether the compliance status with of each term and condition provided was continuous or intermittent. "Intermittent Compliance" can mean either that noncompliance has occurred or that the owner or operator has data sufficient to certify compliance only on an intermittent basis. Certification of intermittent compliance therefore does not necessarily mean that any noncompliance has occurred.

<sup>&</sup>lt;sup>4</sup> Note whether the method(s) used to determine the compliance status with each term and condition provided continuous or intermittent data.

<sup>&</sup>lt;sup>5</sup> Compliance status for these sources shall be based on a reasonable inquiry using readily available information.

II.	Status	for Aco	cidental Releas	se Prevention	n Program:									
	A.		facilityse Prevention I								ns of t	the A	ccide	ental
	B.	If subj	ject: The facili rements of sect	ty ion 112(r).	is		is 1	not ir	n c	ompliar	ice w	vith	all	the
III.	Certif	1.	A Risk Mana appropriate a										ted to	the
Colorathe do  I have reason	ado Reg cument e revie nable in	gulation is being wed th	he Annual Con n No. 3, Part A submitted. nis certification of I certify that	, Section I.E	3.38. This s	signed, base	certific  d on i	ation d	locui	ment mu	ist be j pelief	packa form	nged	with after
Pleaso C.R.S	e note t	hat the	e Colorado Sta false material nay be punish	statement,	representat	ion, o	r certif	ication	in t	this doc	ument	t is g		
		Printe	ed or Typed Na	me							Title			
		S	Signature							D	ate Sig	gned		

**NOTE:** All compliance certifications shall be submitted to the Air Pollution Control Division and to the Environmental Protection Agency at the addresses listed in Appendix D of this Permit.

### APPENDIX D

#### **Notification Addresses**

### 1. **Air Pollution Control Division**

Colorado Department of Public Health and Environment Air Pollution Control Division Operating Permits Unit APCD-SS-B1 4300 Cherry Creek Drive S. Denver, CO 80246-1530

ATTN: Jim King

## 2. United States Environmental Protection Agency

## Compliance Notifications:

Office of Enforcement, Compliance and Environmental Justice Mail Code 8ENF-T U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 300 Denver, CO 80202

### Permit Modifications, Off Permit Changes:

Office of Partnerships and Regulatory Assistance Air and Radiation Programs, 8P-AR U.S. Environmental Protection Agency, Region VIII 999 18th Street, Suite 300 Denver, CO 80202

#### APPENDIX E

### **Permit Acronyms**

## Listed Alphabetically:

AIRS -	Aerometric Information Retrieval System
AP-42 -	EPA Document Compiling Air Pollutant Emission Factors
APEN -	Air Pollution Emission Notice (State of Colorado)
APCD -	Air Pollution Control Division (State of Colorado)
ASTM -	American Society for Testing and Materials
BACT -	Best Available Control Technology
BTU -	British Thermal Unit
CAA -	Clean Air Act (CAAA = Clean Air Act Amendments)
CCR -	Colorado Code of Regulations
CEM -	Continuous Emissions Monitor
CF -	Cubic Feet (SCF = Standard Cubic Feet)
CFR -	Code of Federal Regulations
CO -	Carbon Monoxide
COM -	Continuous Opacity Monitor
CRS -	Colorado Revised Statute
EF -	Emission Factor
EPA -	Environmental Protection Agency
FI -	Fuel Input Rate in Lbs/mmBtu
FR -	Federal Register
G -	Grams
Gal -	Gallon

HAPs - Hazardous Air Pollutants HP - Horsepower

GPM -

HP-HR - Horsepower Hour (G/HP-HR = Grams per Horsepower Hour)

LAER - Lowest Achievable Emission Rate

Gallons per Minute

LBS - Pounds M - Thousand MM - Million

MMscf - Million Standard Cubic Feet

MMscfd - Million Standard Cubic Feet per Day

N/A or NA - Not Applicable NOx - Nitrogen Oxides

NESHAP - National Emission Standards for Hazardous Air Pollutants

NSPS - New Source Performance Standards P - Process Weight Rate in Tons/Hr

PE - Particulate Emissions PM - Particulate Matter

PM<sub>10</sub> - Particulate Matter Under 10 Microns

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PSD - Preventi	on of Significant Deterioration
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PTE - Potential To Emit

RACT - Reasonably Available Control Technology

SCC - Source Classification Code

SCF - Standard Cubic Feet

SIC - Standard Industrial Classification

 $SO_2$  - Sulfur Dioxide TPY - Tons Per Year

TSP - Total Suspended Particulate VOC - Volatile Organic Compounds

## **APPENDIX F**

## **Permit Modifications**

DATE OF REVISION	SECTION NUMBER, CONDITION NUMBER	DESCRIPTION OF REVISION

#### APPENDIX G

## **Minimum Salient Features for a Coal Sampling Plan**

The coal sampling plan shall, as a minimum, include the following details. These details are not provided as an outline or a recipe, but rather to present the minimum information the Division believes needs to be provided in a plan.

- I. Describe how each shipment, batch, or lot of coal received will be sampled in accordance with ASTM D2234-89 or subsequent applicable revision;
- II. Include the provision for a proper chain of custody tracking of the sample(s);
- III. Require samples be prepared in accordance with ASTM D2013-86.
- IV. Require the use of the following test procedures:
  - Sulfur content shall be determined in accordance with ASTM D3177-75 or D4239-85;
  - Heating value shall be determined in accordance with ASTM D2015-77 or D3286-85. The heat content shall be based on the lowest gross heating value of the fuel.
  - Ash content shall be determined in accordance with ASTM D3174 or EPA approved method.
  - Lead and chloride content shall be determined in accordance with the appropriate ASTM or EPA approved method. Lead and chloride may be analyzed on a less-frequent basis as approved in advance by the Division as part of the Coal Sampling Plan.
- V. A summary of the individual test results received during the quarter shall be submitted with each semi-annual monitoring report;
- VI. Readable copies of vendor invoices or certificates of quality reporting the coal sulfur, ash, lead, chloride and heat content shall be submitted with the copy of the coal sample test results. These invoices or certificates may be utilized in lieu of on-site sampling provided the vendor's sampling procedures are in accordance with ASTM D2234-89 or any subsequent applicable revision, included in the Coal Sampling Plan, and approved in advance by the Division; and
- VII. Identify any other EPA or ASTM methods or procedures that will be utilized. The Division recognizes that ASTM or EPA methods are updated periodically. These updated methods are accepted as long as the exact method is noted in the records.

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#### APPENDIX H

## Minimum Salient Features for a Coal Consumption Measurement Plan

The following provides salient features the Division expects to be included in a plan for measuring the amount of fuel combusted by the coal-fired boiler. This list should not be considered a required outline to be followed, but rather a guide to ensure the considerations have been addressed in the plan developed.

- I. The number of buckets of coal loaded onto the coal grizzly shall be counted and recorded each day.
- II. By the end of each new calendar month, the amount of coal used the previous month shall be determined by mulitplying the number of buckets of coal recorded by the weight of the coal in an average bucket (pounds).
- III. Once each calendar year the weight of the coal in an average bucket load shall be verified. The calculation performed in Item 2 above is to be modified as necessary to reflect a new weight.
- IV. By the end of the January of each new calendar year, the coal usage for the previous calendar year shall be verified and cross-checked against the coal-fired boiler burn rates during the period(s) of operation, the coal purchased and the inventory on hand. A disagreement of more than 15% is to be investigated and explained in a written submittal to the Division by the end of February.
- V. All the records related to this coal consumption determination will be made available to the Division for review upon request.

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### **APPENDIX I**

## **Compliance Assurance Monitoring Plan**

## I. Background

a. <u>Emission Unit Description:</u>

Coal fired boiler – Combustion Engineers type VU, S/N 15753 (Unit #1)

b. <u>Applicable Regulation, Emission Limit, Monitoring Requirements:</u>

Regulations: Operating Permit Section II, Condition 1.2

Emission Limitations: Particulate Matter: 36.2 TPY & 0.17 lb/mmBTU

c. <u>Control Technology:</u>

Multi clone (Centrifugal Collector)

## II. Monitoring Approach

II. Indicator Range  The indicator range is an opacity reading less than or equal to 20 percent opacity (6-minute average). An excursion is defined as any opacity reading greater than 20 percent opacity (6-minute average).  Excursions trigger an investigation, corrective action, documentation, and subsequent opacity observations until two consecutive 6-minute observations are within the indicator range.  The indicator range is a pressure drop across the Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water great than the highest pressure drop reading across the Multiclone inlet and outlet flues as measured during initial performance test (IPT) or *subsequent perfor tests verifying compliance with the particulate matter limit. The manufacturer's initial pressure drop measurement of 3.1 inches water (at 430°F) shall substitute for the IPT measurement until results of the are available. Excursions trigger an investigation, corrective action, documentation, and hourly pressure drop measurement of 3.1 inches water (at 430°F) shall substitute for the IPT measurement until results of the are available. Excursions trigger an investigation, corrective action, documentation, and hourly pressure drop measurements until two consecutive hourly measurements are within the indicator range.	eator					
II. Indicator Range  The indicator range is an opacity reading less than or equal to 20 percent opacity (6-minute average). An excursion is defined as any opacity reading greater than 20 percent opacity (6-minute average).  Excursions trigger an investigation, corrective action, documentation, and subsequent opacity observations until two consecutive 6-minute observations are within the indicator range.  The indicator range is a pressure drop across the Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues as measured during initial performance test (IPT) or *subsequent perfortests verifying compliance with the particulate matter limit. The manufacturer's initial pressure drop measurement of 3.1 inches water (at 430°F) shall substitute for the IPT measurement until results of the area available. Excursions trigger an investigation, corrective action, documentation, and hourly pressure drop measurements until two consecutive hourly measurements are within the indicator range.  III. Performance Criteria	4401	Exhaust Stack Opacity	<b>Multiclone Pressure Drop</b>			
less than or equal to 20 percent opacity (6-minute average). An excursion is defined as any opacity reading greater than 20 percent opacity (6-minute average).  Excursions trigger an investigation, corrective action, documentation, and subsequent opacity observations until two consecutive 6-minute observations are within the indicator range.  Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues as measured during initial performance test (IPT) or *subsequent perfortests verifying compliance with the particulate matter limit. The manufacturer's initial pressure drop measurement of 3.1 inches water (at 430°F) shall substitute for the IPT measurement until results of the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues that is equal to the pressure drop reading and up to one inch water greathan the highest pressure drop reading across the Multiclone inlet and outlet flues that is equal to the pressure drop reading across the Multiclone inlet and outlet flues as measured during initial performance test (IPT) or *subsequent perfor tests verifying compliance with the particulate matter across the Multiclone inlet and outlet flues as measured during initial performance test (IPT) or *subsequent perfor tests verifying compliance with the particulate matter across the Multiclone inlet and outlet flues as measured during initial performance te	ement Approach E	EPA Method 9	Pressure drop measured across the Multiclone inlet and outlet in inches of water.			
	le m as pe	less than or equal to 20 percent opacity (6-minute average). An excursion is defined as any opacity reading greater than 20 percent opacity (6-minute average).  Excursions trigger an investigation, corrective action, documentation, and subsequent opacity observations until two consecutive 6-minute observations are	Multiclone inlet and outlet flues that is equal to the lowest pressure drop reading and up to one inch water greater than the highest pressure drop reading across the Multiclone inlet and outlet flues as measured during the initial performance test (IPT) or *subsequent performance tests verifying compliance with the particulate matter limit. The manufacturer's initial pressure drop measurement of 3.1 inches water (at 430°F) shall substitute for the IPT measurement until results of the IPT are available. Excursions trigger an investigation, corrective action, documentation, and hourly pressure drop measurements until two consecutive hourly			
	formance Criteria					
exhaust stack while the boiler is operating under normal conditions. Opacity is measured in 5% intervals; therefore, the minimum accuracy of an opacity reading gas inlet and flue gas outlet while the boiler is operating under normal conditions. The measuring system of a draft or pressure drop gauge connected to be inlet and outlet of the Multiclone in accordance w	ex ur m m	exhaust stack while the boiler is operating under normal conditions. Opacity is measured in 5% intervals; therefore, the minimum accuracy of an opacity reading	Pressure drop is measured between the Multiclone's flue gas inlet and flue gas outlet while the boiler is operating under normal conditions. The measuring system consists of a draft or pressure drop gauge connected to both the inlet and outlet of the Multiclone in accordance with the manufacturer's instructions. The minimum accuracy is $0.1$ inches of $H_2O$ .			
b. Verification of N/A N/A Operational Status		N/A	N/A			
			The draft/pressure drop gauge will be calibrated annually by comparison against an instrument of known accuracy. The acceptance criteria is $\pm$ 0.1 inches of H <sub>2</sub> O.			
d. Monitoring Frequency  Opacity observations (six-minute observation with readings at fifteen second intervals) will be conducted weekly when the boiler is operating under normal (non-startup/shutdown/sootblowing) conditions conducive to a Method 9 observation (i.e., daylight hours).  Daily when the boiler is operating under normal (non-startup/shutdown/sootblowing) conditions.	ot in th st	observation with readings at fifteen second intervals) will be conducted weekly when the boiler is operating under normal (nonstartup/shutdown/sootblowing) conditions conducive to a Method 9 observation (i.e.,	Daily when the boiler is operating under normal (non-startup/shutdown/sootblowing) conditions.			
f. Data Collection Procedures  Data are recorded manually during the opacity observation by the certified observer. A sample observation form is shown in Exhibit 1.  Data are recorded manually by a Plant Operator or operat	ures or	opacity observation by the certified observer. A sample observation form is				
e. Averaging Time 6-minute average. None	raging Time 6-	6-minute average.	None			

<sup>\*</sup> The permittee may conduct additional tests to verify the effectiveness of the control equipment over a broader pressure drop range. These tests must be approved by the Division in advance and Division testing guidelines must be followed.

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## EXHIBIT 1

# EPA METHOD 9 - OPACITY OBSERVATION FIELD DATA AND OBSERVATIONAL RECORD

		Test Date:								
Type, Name, and Location	of Facility	(circle one):								
Generating Unit ARPA Unit - North Substation 714 Pine Holly, CO 81047	RPA Unit - North Substation La Junta M 14 Pine lª & Bellvi		Municipal Utilities Lamar Light & Power riew 100 North Second Street			Power Plant  Las Animas Municipal L&P  8 <sup>th</sup> & Moore  Las Animas, CO 81 054				
Power Plant Springfield Municipal Utilities 1241 Tipton Springfield, CO 81073	eld Municipal Utilities Trinidad Municipal P&L pton 1925 East Main			Power Plant Raton Public Service Co 940 South Second Street Raton, NM 87740				Other (Describe):		
Description of Emission U	Init:		Opacity	Obse	rvation					
Unit#or Name:		Fuel (Circle One): Natural Gas	Start Time:				End Time:			
Operating Mode:		Diesel Dual-Fuel	Sec Min	0	15	30	45	Comments		
Control Equipment:		Other:	1							
Describe Emission Point:	<u> </u>	*	2							
			3							
Description of Starting Co	nditions:		4		16					
Height of Emission Point:		servation Point:	5							
20.784	5040		6	Ì						
Approx Distance and Direction to Emiss	ion Point from Obse	rvation	7							
Emission Color;	Water Drople	t Plume:	8							
Attached∐ Detacl		] Detached☐ None[]	9	1			i i			
Describe Plume Background & Backgro	und Color:		10							
Sky Conditions (Clear, Overcast, % Clouds,		Ambient Temp:	11							
Estimated Wind Speed (mph) and Direction;		% RH (Optional):	12				ľ.			
Estimated with opera (tipit) and Directors.		se re r (Optional).	13		10					
Description of Ending Conditions:		10. 19910/100	14							
Height of Emission Point: Height of O		servation Point:	15		J.					
Approx. Distance and Direction to Emission Point from Observation			16							
			17							
Emission Color:	Water Drople	tPlume: ]Detached[None[	18							
Describe Plume Background & Background Color:		Detached Nones	19							
SE EN ELL SEN EL TOUREN V		T w 187Var	20							
Sky Conditions (Clear, Overcast, % Clouds,		Ambient Temp:	21							
Estimated Wind Speed (mph) and Direct	ion:	% RH (Optional):	22							
Source Lavout Sketch			23							
Source Layout Sketch:			24		9		£ /			
Indicate stack			25							
with plume ( <del>Q</del>			25							
observer position (X),			Observer's	s Name (P	rint)					
sun ([] ), wind (wind[] ), &			Observer	Observer's Signature						
North (ND )			Observer'	s Organiza	ation			\$ <b>.</b>		
Longitude (Optional): Latitude (Optional):			Certified E	Ву	Date					

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